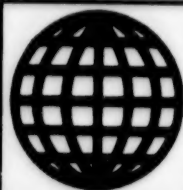


JPRS-EER-89-062
26 MAY 1989



**FOREIGN
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JPRS Report

East Europe

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JPRS-EER-89-062

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ALBANIA

Need To Promote Young Artists, Writers Stressed
21000016 Tirana ZERI I POPULLIT in Albanian
25 Feb 89 p 3

[Article by Jerina Zaloshnja: "Quality Paves the Way for Publication"]

[Text] Every creative work which becomes the property of the masses must first be published, performed, or exhibited. How has this worked and how is it working in the area of creative work by young talents?

In the opinion of literary and artistic circles, various ideas are circulating, through which works and authors are making names for themselves, while they are also raising problems and voicing useful opinions in the best of their work. Let us pause more concretely on these.

Complaints are often heard from young creative artists who knock at the doors of editorial boards and commissions. In order to publish a piece of writing in the newspaper DRITA, in order to give a new concert with a symphony orchestra, many people have to wait months because of many interventions on the part of others, and not because of considerations of quality. This is a somewhat recurrent story. Some of our famous young poets, such as Ilirjan Zhupa, Besnik Mustafaj, etc., not to mention more recent examples, were published with difficulty and after a long time. Pertef Lici tried for several years to have a publishing house issue his first book, which has only now appeared in print. Ervin Hatibit, a talented 15-year-old youth, had to wait half a year before only one of a fine cycle of his poems was published. Vladimir Kotani, the composer, was obliged "to sing" to the song commission because if it had not been for the commission, he might not have been among the competitors at festivals and might not have been the winner at one of them. The same thing has also occurred with several individuals in the figurative arts. In many cases, there has been a kind of friction between young creative artists and acceptance by commissions and editorial boards. For the sake of veracity, it must be said that those works by young creative artists which have had value have not remained and do not remain unpublished. But among these artists, there are others who, although they have not yet reached a mature level in their creative work, show promise for the future. Let us consider the area of poetry. Despite occasional printed criticism, the newspaper ZERI I POPULLIT continues frequently to publish writings of well-known authors 40 years old and older. In DRITA and NENTORI, young authors seldom appear. (It is not fortuitous that the average age of authors of first books of poetry is relatively advanced.) What do some of the managers of our literary organs say about this publishing phenomenon? "Pressure from creative work of value by young people," the director of the newspaper DRITA told us, "is great, yet we cannot issue their work more than once a month under the rubric 'Young Authors.'" The director of NENTORI told us the same thing.

On the basis of the principal that in art, quality is also quantity, these attitudes are justified, yet something more can and must be done. With regard to first books by young people at the N. Frasheri publishing house, it seems that an influence is exerted on the editors if you are already known, if you have appeared as an author in the periodical press. Ilirjan Zhupa, the poetry editor at this publishing institution, says that six books of poetry by young authors which will be issued this year are by those who have made a kind of name for themselves in the periodical press. This may seem like a large number, but if you bear in mind the requirements for publishing the creative work of young people, it is actually small.

What does the Union of Writers and Artists think about solving the problem of publishing more useful creative work by young talents? The comrades in the leadership of the Union of Writers and Artists say that it is necessary to create a special literary organ for youth. This does not mean that the entire outpouring would be concentrated here, but this would open up a special and larger sector. This could be a good solution, but it could not be everything. Another way would be to publish in the journal YLLI or to issue a special page in ZERI I POPULLIT, as was done in the past. Even more interesting is the expected appearance of anthologies from the Naim Frasheri publishing house. The director of this institution, Gaqo Bushaka, says that, this year, collections of prose writing by young authors will appear. Later, poetry collections are expected. In order to publish more of these, we think that they could be accompanied by an introduction by some well-known writer, which would add more importance to the edition. But there are also various broadcasts of readings or concerts on television which can assist in making better known the creative work of young people. This activity should not be confined only to the center, since, as is known, there are 26 branches of the Union and 26 newspapers in districts, which can give great help.

Better utilization of all these conditions created by the party provides the possibility for wider exposure of the strengths of young people, but this brings up the great problem of quality. It would be harmful to art to require publication for its own sake, to fill up the pages of publications and programs, or for some organ or institution to say, "We, too, are encouraging young talent."

Sometimes it has happened that there is less insistence on the term "talent." Not everyone who writes or composes something has created an artistic work. Time and criticism must make a correct judgment according to the requirements of high quality. Otherwise, it would be valueless to make proposals to increase the number of publications, books, and anthologies. It often happens that one reads vulgar things, doggerel, even ambiguous work, and not real poetry. Many appear in some periodical collections. Presenting this sort of youthful work actually creates a fictitious renown for them. Benevolence, creative social help, and encouragement do not mean tolerance for the ideological and artistic values of

youthful creativity. If this is permitted, it exerts an influence on the officialism and equalizing of cultural values. The increase of requirements for the highest possible quality in creativity is the best and most useful help for young talent.

HUNGARY

Lukacs Calls Multiparty System 'Societal Reality'
25000173b Budapest MAGYAR HIRLAP in Hungarian
23 Mar 89 p 5

[Text] Janos Lukacs, member of the MSZMP's Politburo and secretary of the Central Committee [CC], visited Hajdu-Bihar county for two days. Tuesday morning in the Debrecen offices of the county party committee, he was briefed by Dr. Sandor Postas, the first secretary of the committee, on the economic and political life of Hajdu-Bihar county. Referring to the disorders in the party's life, the first secretary stated that the rapid changes taking place in the evaluation of the past, the surveying of the present, and the sketching of the future place heavy burdens on the membership, and at times interfere with their ability to act. The distance between the leadership and the members is great and ever increasing: The latter feel that important questions, such as the issue of the multiparty system, are being decided by the leaders without anyone asking the members' opinion. Reacting to this, Janos Lukacs said that the issue of the multiparty system was already on the agenda before the last party congress, and several people argued for it. On the other hand, it is a fact that the leadership was not firm enough in their adherence to the May party resolution, according to which the MSZMP considers political pluralism realizable within the framework of a single-party system. Janos Lukacs emphasized that today the multiparty system is a societal reality, and the MSZMP cannot stop it through political means and does not wish to stop it through administrative ones.

On Tuesday, Janos Lukacs attended the central Debrecen festivities honoring the seventieth anniversary of the declaration of the Council of Republics. Following this, he visited the Hajdu County State Construction Factory. Wednesday the secretary of the CC continued his program by traveling to Hajduboszormeny. He met and consulted with party workers from the county's agricultural enterprises in the offices of the "Peace" cooperative.

Huszar Proposes Electoral Law Without PPF Control

25000173a Budapest MAGYAR HIRLAP in Hungarian
23 Mar 89 p 5

[Interview with Istvan Huszar, first secretary of the Patriotic People's Front (PPF), by L. Ferenc Gazso: "Who Should Be Sent to the Distinguished House? The PPF Should Not Manage the Elections! A Conversation in the Parliament With Istvan Huszar"; date and place of interview not given]

[Text] It is no longer acceptable that individuals nominated to run for seats in the National Assembly still have

to give written testimony that they ascribe to the program of the Patriotic People's Front [PPF]. Nor should we have to accept the fact that, in the midst of frequent shifting of deputies, the system of electing alternate deputies has remained the same. Parliamentary seats that become vacant should always be filled by holding interim elections. This was the opinion included in the position paper of the Alliance of Free Democrats, published on our pages yesterday.

There has been an acceleration in political life, and nothing demonstrates this better than the fact that a few hours after this petition was published, a young woman from Szeged, Mrs Rozsa Edit Bodo, rose to speak in the National Assembly and in the name of 25 fellow deputies proposed that the House urgently modify the law concerning elections.

"There are a number of electoral districts where interim elections are now being prepared, and in today's political climate their significance has increased considerably," said the lady deputy during a break in the proceedings. "I proposed that only those have the right to cast a vote during nomination who reside in the district. I also consider it important that, instead of having to ascribe to the program of the PPF, each of our candidates should be compelled to declare loyalty to the constitutional order of the Hungarian Peoples Republic. This would prevent political manipulations from taking place in the future. It has also become evident by now that setting up the institutions of alternate deputies and alternate council members was a mistake. It would be unfortunate if during the coming interim elections the citizens could still only vote for alternate deputies. It is my firm conviction that, as soon as possible, we have to eliminate this law."

Anachronistic View

During the next intermission in the Parliament, I asked Istvan Huszar, first secretary of the Patriotic Peoples Front: What do you think of the proposals by these deputies and the initiative made by the SZDSZ?

[Huszar] The National Assembly decided not to put my fellow deputy's proposal on the agenda. It will be discussed during the April session. I agree, it is anachronistic to require a deputy to declare whether he accepts the program of the PPF or not. Such requirement is not in accordance with today's political circumstances. I would be behind the times if I were to insist on maintaining such a meaningless regulation. Of course, the PPF, which is getting to ready to hold its congress, has, and will continue to have its own election platform, but I would not think it proper for it to be declared official by the new electoral law. I also think that it would be better if new deputies and council members acted in the spirit of the Constitution and worked on behalf of their electorate.

[MAGYAR HIRLAP] What we are talking about is far from being a theoretical question: After all, there are lots of empty seats in the House, as many people turned in their mandates.

[Huszar] Just today I have looked over the situation: Three individuals are missing from the national list, five from the ranks of already elected deputies, and by tonight there will be one fewer of us, because it has already been announced in the press that Miklos Vida also resigned his seat.

[MAGYAR HIRLAP] At times like that, the alternate deputy automatically takes over the vacant seat, provided that he received one-quarter of the votes cast in his district. Nowadays there have been much criticism levelled at this solution.

[Huszar] The system of electing alternate deputies is not unknown in bourgeois democracies. That is not the sole reason why I say I would not give the system up quickly, but also because I know our own circumstances. Of course, it is an entirely different matter if the alternate deputy also resigns his seat. We have an example of this; it happened recently in Godollo.

[MAGYAR HIRLAP] A great question of our times is this: Does the present National Assembly, still elected under the conditions of monolithic political life, have the authority to create a new Constitution? In this connection, many people suggest that a constitutional convention should be called, which would better reflect political interest relations than the present National Assembly. What is your opinion on this?

[Huszar] I consider the present National Assembly to be well-suited to create a new Constitution. I feel that the parliamentary debates, in spite of their contradictory nature, are basically supportive of reforms, and their participants cannot be considered the opponents of political transformation. At the same time, I agree that the personal makeup of the National Assembly does not reflect the political segmentation of the nation.

Changing Functions of Public Law

[MAGYAR HIRLAP] Many people object to the fact that more than 70 percent of the deputies are members of the MSZMP . . .

[Huszar] This is true. However, one cannot characterize the National Assembly's actual nature by simply saying that there is a monolithic block making up nearly three-quarters of the House members. Nowadays it must be acknowledged that there is at least as much difference of opinion among MSZMP-member deputies as between those who are not members of the party.

[MAGYAR HIRLAP] In your judgment, can and will the PPF, which is getting ready to transform itself, retain its basic role of being the sole organizer and manager of elections in Hungary?

[Huszar] I believe that the public administrative functions of the PPF must be thoroughly altered. Under the

conditions of a multiparty system, it would make no sense for the PPF to fulfill any kind of political and service functions.

[MAGYAR HIRLAP] Who should manage the elections in the future?

[Huszar] That function should be performed only by a state apparatus, perhaps election committees, entirely independent of political parties.

[MAGYAR HIRLAP] Do you agree with those who claim that the national slate is an anachronistic aspect of our political life?

[Huszar] The nationwide debates concerning the electoral laws revealed that the overwhelming majority of the citizens does not approve of the national slate. Of course, as of now, no one can pass final judgment on this issue; or about the other question which I consider important: Should we have a unicameral or bicameral legislature?

[MAGYAR HIRLAP] Which do you favor?

[Huszar] I am in favor of a bicameral system, because our present unicameral system does not reflect our society's actual makeup and the complex interest relationships existing within it. It is also my opinion that a bicameral legislature would be the best guarantee for offering suitable representation for social organizations, churches, national and other minorities within this body.

In the Process of Purification

[MAGYAR HIRLAP] What kind of National Assembly would you prefer to see in the near future?

[Huszar] This is not a time when a responsible person would undertake political forecasting. The next parliamentary election will be an important step on the road toward genuine pluralism and democracy. I do not believe that the election will put the finishing touches on any political development. The way I see it, the newly composed National Assembly will be created as part of a process of purification. What I would like to see is a National Assembly whose members are politically better trained and more ready to participate in debates.

[MAGYAR HIRLAP] Looking at our education system and our history for the past few generations, we are short on that kind of training. What makes you think that the next legislative body will differ from the present one?

[Huszar] If the principle of competition will prevail in political life, if there will be clashes that rely on the use of rational arguments, it will offer better chances for the natural selection process, and it is hoped that more and more individuals will participate in political life who will be suitable for that role.

POLAND

Recent Polish-Israeli Efforts To Normalize Relations Described

26000474 Warsaw TRYBUNA LUDU in Polish
3 Mar 89 p 6

[Letter to the editor by Marian Mushkat, University of Tel Aviv, director, Institute of International Affairs, and member, International Academy of Arts and Sciences: "On the Normalization of Polish-Israeli Relations"]

[Text] Two recent meetings in Israel demonstrated yet again the tremendous reservoir of friendship, goodwill, and interest felt by broad segments of the Israeli public for the process of the democratization and reforms in Poland and the prospects for the materialization of the ideas of the roundtable. No one can feel surprised by this in view of, after all, the number of Israelis of Polish origin.

The first meeting was held on 1 December 1988 at the Polish Interests' Section in Tel Aviv, where General Kaminski decorated, on behalf of Poland's Council of State, Israeli citizens with the Cross of Lenin commemorating the 45th anniversary of the return of Polish soldiers to the Eastern Front of the Struggle Against the Nazis.

The second meeting took place at the Institute of International Affairs in Tel Aviv, as part of a discussion of the changes in Poland indicating improvements in the economic situation and a national accord. All those present, even the persons who still have not dropped their resentments and grievances relating to the memories of the Kielce Pogrom in 1946, the "personnel readjustments" [removal of Jews from high-ranking party posts] in the 1950's, and the Moczar-initiated [Mieczyslaw Moczar, head of the Security Police in those years, and the initiator of an anti-Semitic campaign] exodus of 1968, were pleased by the prospects for overcoming the crisis in the land of their origin, which is besides consonant with the tradition of the millenium-long friendship and with what is reflected in the legend of the Jew Prochownik, the king of Poland, of "Queen" Esther [the fabled mistress of King Casimir the Great (1310-70)], and in the activities of such individuals as Kosciuszko's fellow fighter Colonel Berek Joselewicz, General Lewinski of the November [1830] Uprising, the Jewish ministers of state in the government of the January [1863] Uprising, Kronenberg [Leopold Kronenberg, 1812-70, financier and industrialist, a leader of the "millenialists" (milenerzy), so dubbed by their opponents because they supposedly preferred building up the economy even if that meant waiting a thousand years for Poland's independence] and Wohl and others, the cofounders of the Polish Socialist party, the SDKPiL [the Social Democratic Party of the Polish Kingdom and Lithuania], the Polish Communist Party, and the Polish Workers Party,

the Jewish fellow soldiers of the Home Army, the People's Army, and the Polish Army, and also the "Righteous Gentiles" who risked their lives to save victims of Hitlerism. But I would be sinning if I were to gloss over the voices of those embittered not only by the demonstrations of anti-Semitism in the past but also by certain facts in recent years.

It was also painful to learn that Prime Minister Rakowski mentioned in a recent conversation with the Israeli Deputy Prime Minister Peres that Poland is interested in broadening economic relations with Israel, but made no mention of diplomatic and cultural relations as well?

The foreign policy of People's Poland has always been distinguished by such initiatives for peace and cooperation as the Rapacki Program and the Jaruzelski Plan. These initiatives moreover grew out of the soil of the Polish science of international law as exemplified by the initiatives of Stanislaw of Skarbimierz [?-1431, lawyer, philosopher, founder of the Polish school of international law] and Pawel Wlodkowic [1370-35, rector of the Krakow Academy, author of "On the Rule of the Pope and the Emperor over the Infidels"] in the 15th century, Andrzej Frycz-Modrzewski [ca. 1503-72, Renaissance political writer, author of treatise "On Healing the Republic," a pioneer of modern European science of the state and the law] in the 17th century [as published], and Hieronim Stroynowski [1752-1815, economist, bishop of Vilno, rector of the Academy of Vilno, member of the Commission for National Education] in the 18th century. That policy has always stressed the importance of cooperation among all nations irrespective of their system of society, political orientation, and religion. That had been so during the Battle of Grunwald [1410, when an alliance of Poles, Lithuanians, Russians, Czechs, and Tatars, led by Wladyslaw Jagiello defeated the Teutonic Knights] and such was the basis of the Polish concept of international penal law during the Nuremberg Trial as formulated by Jerzy Sawicki, Tadeusz Cyprian and others, and also by the publicist Marian Podkowinski.

TRYBUNA LUDU of 14 January 1989 quoted a comment by a Soviet diplomat, Robert Tuvdiyev, given to the Arab newspaper AL-ITIHAD, that the normalization of USSR-Israel diplomatic relations is to be expected soon. A similar comment was made to us at the Institute of International Affairs by Martyrosov, chief of the consular mission of the USSR in Tel Aviv. This is not surprising considering that Mikhail Gorbachev and Minister of Foreign Affairs Shevardnadze had already declared previously that the rupture of diplomatic relations with Israel after the War of 1967 was a mistake. A decision to resume diplomatic relations with Israel in the very near future was also recently announced by the prime minister of Hungary. Should not Poland, a country which leads in so many fields within the socialist camp, be a pioneer in this matter as well? Particularly considering that in Poland's case the point is not just to repair a mistake and to get rid once and for all of experts

in anti-Semitic incitement but also to satisfy its numerous friends in Israel, admirers of its literature, fine arts, and science, and often descendants of Warski [Adolf, pseudonym of A. Warszawski, 1868-1937, Sejm deputy, Comintern member], Rose Luxembourg, Perl [Feliks, 1871-1927, cofounder of the Polish Socialist Party], Liberman, Fiedler [Franciszek, pseudonym of Efraim Truskier, 1880-1956, PZPR Central Committee member, editor in chief of party periodical *NOWE DROGI*], Rabbi Majzel, the "Red Rabbi" Mushkat of the Praga suburb of Warsaw, and singers of the beauty of Polish land, Jewish writers, such as Opatoshu [Joseph, 1887-1954], Isaac Bashkevich Singer, and others.

POLITYKA Weekly News Roundup
26000454 Warsaw *POLITYKA* in Polish
No 15, 15 Apr 89 p 2

[Excerpts]

National News

[Passage omitted] The Sejm adopted a law changing the Constitution of the People's Republic of Poland (introducing the institutions of the Senate and the president and recording that the current term of the Sejm ends 3 June 1989), the election law to the 10th Sejm (1989-93) and to the Senate, the Law on Associations, the law on trade unions for individual farmers, and amended the law on trade unions. In voting on the particular laws, a significant number of deputies abstained from voting (on the law changing the Constitution there were 4 against, and 7 abstained, on the Sejm election law, 3 against, 15 abstained, on the Senate 7 against, 25 abstained, on associations 14 against, 71 abstained, on trade unions 4 against and 43 abstained, on the union for farmers 8 against and 53 abstained).

As the premier announced, the daily press published the list of enterprises that, as a result of excessive wage increases, find themselves in difficult financial circumstances and which the bank either has either denied loans (9 enterprises) or warned of the loss of creditworthiness (24 enterprises, including the Hard Coal Mine in Bogdanka, the Odra Shipyards in Szczecin, the Centra Electrochemical Plants in Poznan, the division of State Motor Transport in Kwidzyn). The publication of enterprises that have raised the prices of their products by more than 50 percent was announced. [passage omitted]

The day after the completion of the deliberations of the roundtable the Public Opinion Research Center carried out a survey among Warsaw residents (random sample). Interest in the course of the deliberations was great (67 percent of the respondents; slight, 28 percent). In response to the question who gained the most, 13 percent said rather the authorities, 19 percent rather the opposition, 42 percent both sides, 11 percent neither side. The transmission of the conclusion of the deliberations was watched by 50 percent of the residents of Warsaw; and

the retransmission around 2300, by 32 percent; 54 percent had a negative opinion of the break to transmit the soccer match.

A new biweekly, *KOSCIOL NAD ODRA I BALTYSKIEM*, has appeared; it is published by the curia of the bishops of the two Western Pomeranian Dioceses (Szczecin-Kamien and the Koszalin-Kolobrzeg). The quarterly *REGIONY* has become a bimonthly. In the first issue in the new format, the journal edited by Wieslaw Mysliwski announced an initiative to form a literary club associated with the editorial offices of *REGIONY*, for "people of various worldviews, different aesthetic attitudes, and different generations," forming "something of a community of difference." By the way, we recommend the peasant funeral laments collected by Alicja Trojanowicz, and the "Book of Dreams" by Henryk Bereza, remarks by the well-known literary critic from 1987-88.

"Briskly Upwards" is the title of a note in *ZYCIE WARSZAWY* reporting on the increasing prices of the free-market dollar. The Polish Security Bank in Warsaw raised the exchange rate three times in the course of a week, but the purchases were too small, and it was necessary to limit sales. The dollar again reached 3,270 zloty bid and 3,350 asked. The table of the Polish National Bank for 3 April 1989 also notes an increase in the official exchange rate to 600 zloty to \$1.

The Independent Cultural Forum met at Warsaw University, the participants adopted a proposed Charter of Polish Culture and sent a telegram to Pope John Paul II reporting on the work of the forum. [passage omitted]

New Organizations. The Polish-British Friendship Society has been formed; the chairman of the temporary board is Prof Jacek Fisiak, minister of national education, English specialist. The Union of Political Prisoners of the Stalinist Period (individuals wrongly repressed in 1939-56) has been registered. The Union of Democratic Youth has been registered. [passage omitted]

On the Left

[passage omitted] A collective portrait of Soviet society from 200,000 answers to a questionnaire in *LITERATURNAYA GAZETA*: 62 percent think they have no influence on the course of political events; 10 percent participate actively in the political life of the country. Material conditions: 11 percent responded satisfactory; 33 percent stable but modest; 27 percent serious limitations; 29 percent, difficult to make ends meet. Social fears: 85 percent fear technical catastrophes, 70 percent fear national conflicts, 40 percent fear economic crisis, 40 percent fear epidemics, 5 percent fear war. Social plagues: 60 percent corruption, drunkenness, speculation, theft; 58 percent the technical backwardness of the USSR. Stalinism: 17 percent, unmasked too little; 26 percent too much, 49 percent, to the appropriate degree. [passage omitted]

In Hungary a new customs law: the duty on imported goods has increased from 30 percent to 45 percent of their value; the 15 percent relief for video equipment has been eliminated. Only goods worth 5,000 forints can be imported without duty (until now 10,000 forints). The increase in duties and the devaluation of the forint is to counteract the flight of hard-currency from Hungary.

"In the Role of the Savior of Socialism" is the title of an article in RUDE PRAVO which contains another sharp attack on Al. Dubcek, surely in association with the numerous interviews which he has granted the Western media (after the disturbances in Prague).

Cardinal Fr Tomaszek, primate of Czech and Moravia, sent a letter to the director general of Film Czechoslovakia protesting against the possible importation and distribution in the CSSR of the movie "The Last Temptation of Christ" of Martin Scorsese.

A letter from the well-known writers Arkadiy and Boris Strugatski to the weekly OGONEK: "Openness is for now the only genuine achievement of perestroika. It is horrible to think that it suffices to change the editorial staff of some 10 newspapers and journals and in an instant we have retreated 10 years: as if nothing had happened, neither the new thaw, nor the hopes, nor the dawning prospects. Openness must be protected; for now besides it, we have nothing. And it sticks like a bone in the throats of many secret and open supporters of stagnation, a bone which they can neither swallow, nor spit out. And they would like to!" [passage omitted]

The first (and so far only) discussion club for young people in Prague has been closed. The motivation: organizational and technical reasons and the "necessity to prepare the Prague youth organizations for the approaching reporting and election conference"; the activity of the club is to begin again at some indefinite time. The decision was preceded by the publication in newspapers of letters from readers outraged by the intensity of the discussion and the sharpness of the questions and answers.

Hungarian radio broadcast, for the first time in its entirety, the text of the speech read by Cardinal J. Mindszenty on 3 November 1956, which the authorities described as "counterrevolutionary" at the time.

On market economies, a comment by Harry Nick, the well-known economist of the GDR: "The thought constructions on 'market socialism' are naive; the ideas about ways of regulating a market economy and about the supposed regenerative actions which can be expected from free competition and from decartelizing the socialist monopoly are dreams." In the capitalist countries, the process of concentration and centralization is moving ahead inexorably. Some companies have greater research and production forces "than the entire respective branch of industry in the GDR." H. Nick asks whether the

socialist market economy does not lead to an objectively high rate of inflation and suggests it does.

Rolf Henrich (age 45), the author of the book titled "The Welfare State" published in the FRG, who, however, lives in the GDR, has been removed from the SED. Previously, he was prevented from practicing law. The book sharply criticizes social relations in the GDR.

The replica of the Holy Grave in Goerlitz, from the 15th century, is to be restored to its former splendor. At present it is threatened with ruin. In West Berlin, in consultation with the GDR authorities and the Church, a foundation was formed to collect funds to begin work on preserving and reconstructing the grave and its surroundings.

"The crime curve in the USSR has begun to rise sharply in the last year. The number of murders has increased by 14 percent, robberies and attacks, by more than 40 percent, thefts, by 33 percent. An increase in professional crime and the rebirth of the theft tradition has been noted," says G. Ovcharenko in PRAVDA. [passage omitted]

Opinions

Grzegorz Boguta, head of the Nowa Independent Publishing House:

(Interviewed by Marek Baster, TAK I NIE 24 March 1989)

[Question] For some time now cassettes from Video-Nowa have been circulating in Poland.

[Answer] Yes, this is a fairly new initiative. It began in 1985 with Ryszard Bugajski's "Interrogation" which we took off the shelf. Our first efforts were simply reproductions; we took "arrested" films out of the archives. Only later did we begin our own production, which initially was current-event journalism, for example, interviews with Zbigniew Brzezinski, Leszek Moczulski, Father Jozef Tischner, Wlodek Frasyniuk. Later we joined up with professionals, thanks to which we could make such films as Marcel Lozinski's "Witnesses," which is about the Kielce pogrom in July 1946 or most recently Jacek Petrycki's "Perhaps One Cannot Speak About This?," which is about the little Katyn in the Augustow forests. We have also published a controversial film about Wladyslaw Sila-Nowicki, titled "Defender." Perhaps under the new conditions, Video-Nowa will also be able to operate officially as a private production company or as a television editorial group. I make no secret of the fact that I do not want our unit to become a thing of the past.

Boguslaw Kolodziejczak, member of the Secretariat of the PZPR Central Committee:

(Interviewed by Jerzy Papuga, KONFRONTACJE March 1989)

[Question] Will the PZPR want to develop its agitation in Solidarity? Will the resolution forbidding party members to join its ranks be revoked?

[Answer] For now it is not known whether they will want us in their ranks. But when they become legal, begin operating openly and legally, some party members will seek their place among them. Practice will decide. . . . The resolution of which you speak concerned another Solidarity and another historical time; it derived from a negative evaluation of a series of actions which Solidarity undertook and which led our country to the bottom of the crisis.

Prof Dr Andrzej Kajetan Wróblewski of the Institute of Experimental Physics of Warsaw University:

(Comment in a survey by the monthly WIEDZA I ŻYCIE March 1989)

"I see an important (though not the only) reason for the development of the civilizational gap between Poland and the highly developed countries in the habit of rejecting solutions tested in Western countries after the war (on the pretext that they were foreign or antagonistic ideologically). In many areas of life, including science and technology, our own, frequently absurd, solutions were attempted; further, scientific and cultural exchange with the West was significantly hampered or not permitted; in education, on the other hand, emphasis was placed on ideology, instead of on substantive materials.

Kazimierz Olesiak, deputy premier, ZSL activist:

(Interviewed by Henryk Maziejuk, PERSPEKTYWY 7 April 1989)

[Question] What is the goal of the possible change of the name of the ZSL to the Polish Center-People's Party announced by president Roman Malinowski?

[Answer] The main point is that our party wants, to a greater degree, to enter the general national arena, in order to associate not only farmers and populist intellectuals and other residents of the rural areas, but people in general who are inclined to accept the party's ideological identity and programmatic independence and goals. This will allow the populist movement to significantly broaden the range of its influence. [passage omitted]

Student, Militia Versions of December 1988 Warsaw Confrontations

26000418 Warsaw KONFRONTACJE in Polish
No 2, Feb 89

[Article by Agnieszka Blotnicka: "Students—Militia, or Adagio on Strings and Organ"]

[Text] The illegal demonstration of the Polish Socialist Party was announced for 1330, but just prior to the planned time, several hundred individuals gathered on

the grounds of the University. Among them, in addition to the university students, there were high school students. Some of them were there by chance; others were drawn by the anniversary date of 13 December and the heated atmosphere of the university; others were waiting for the happening of the Orange Alternative which was to take place at 1500 hours.

In front of the University gates, as is usually the case on such occasions, a large crowd of onlookers gathered. The students are chanting, but the curiosity seekers can hear only isolated words. It was decided to move the ceremony to the site of the Nicholas Copernicus monument.

"A commemorative, patriotic declaration was to be read there," says one participant. "When the gates were opened, we moved slowly with our signs in the direction of the monument. At that point, movement occurred in the ranks of the numerous militia present; the militia trucks slowly began to drive into our group. Attempts were made to drag some of us into them, but when it proved to be impossible to catch us, the militiamen drove away. But only to Karowa Street."

About 200 individuals gathered around the monument. A militia officer called for us to disperse in 50 seconds. At 1400, the demonstration was considered over, and the demonstrators began to return to the University.

"And then the security services initiated an attack, totally unexpectedly," says another student. "We were all surprised, because we were already returning to the University grounds. They attacked us unnecessarily, and what happened later was only the consequence of someone's sudden decision. That is how things were. When we realized that the helmets and shields did not protect the militiamen, we began to defend ourselves. A dozen or so individuals from both sides struggled; the others returned to the University grounds. During this first encounter we only threw yogurt. Later, it was genuinely necessary to use stronger arguments. This certainly would not have happened if the student security patrol had exercised supervision as it does during demonstrations by the Independent Association of Students."

About 1500 a positional struggle began. Equipped units of the militia gathered near the gates of the University. The closed gates of the University opened and a dozen or so young people showered the closest group of functionaries with stones. When the line of militia and riot police moved toward the students, they quickly retreated to the university and locked the gates. The autonomy of the university guaranteed security. Later the scene repeated. The gate opened again, but now bottles and pieces of brick and two stray smoke grenades are thrown repeatedly first in one direction, then in the other.

The battles end around 1600. The University grounds empty. The students disperse. Detente. The television

crews disappear as quickly as they appeared. Pieces of brick, crushed canisters left from the gas, a little glass remain on the streets.

"The job of the militia is to maintain order," says Captain Andrzej Zaczynski, spokesman of the Capital City Internal Affairs Office. "During a manifestation, parade, or demonstration, we make sure that these types of actions do not disorganize street traffic. Obviously, it is best if the militia units ensure the safety of the demonstrators. This is possible, however, only when the demonstration is legal, when it has previously been registered in the City Office. Otherwise, when no one is responsible or does not take a determined stand, the crowd's behavior is unpredictable. This was the case on 7 October 1988, when we intervened against the participants of the happening of the Orange Alternative on Dzierzynski Square. Previously, during plays of the Alternative, such things had not happened. There was no need, for the representatives of the happening agreed on the time of their play with a militia officer, and the place chosen did not threaten to disturb the public order. But Dzierzynski Square is a very busy place in the city, especially during rush hour, and the happening there was organized during rush hour. The intervention of the security forces was caused chiefly by the threat to the public order."

"Prior to 7 October 1988, our street activities were only controlled by the security forces," says a student of Warsaw University, an active participant in the happenings of the Orange Alternative. "There were no serious conflicts with the militia, and everything ended with a gentlemen's agreement with the officer supervising the course of the happening. We calmly discussed all the conditions for the activity with him, including the duration and the area it could cover. These talks became a traditional part of our activities. But on 7 October on Dzierzynski Square, the militia brutally attacked; as a result, several of our colleagues were beaten and many individuals injured. Some were held for 48 hours. It was a surprise. There had not been such aggressive intervention before. It appears that the militia beats when young people chant 'Dzierzynski our idol'. This is laughable. You ask whether 13 December was a reaction to 7 October? And that is why the stones were put into action? I cannot give you a definite answer. I assume that a certain sense of despair and futility in light of the direct attack of the militia could provoke a desire for revenge. Whether that was the case here, however, I do not know."

"On 13 December, the situation was similar," say Captain Zaczynski. "When the appeal and calls by the supervising officer produced no results, and I must add that in such an announcement the commander of the militia unit warns of the legal consequences and repeats the warnings several times, the decision to initiate action was made. The use of force is a final measure, and the decision to use it is made after an exact evaluation of the threat associated with the degree of the aggressiveness of

the demonstrators. The contents of chanted slogans never cause the use of force, even the most insulting ones, usually directed at the riot police present. The security forces are prepared for such verbal attacks. But when the aggression of the demonstrators moves from the verbal to the active, intervention becomes necessary. I repeat it is a final measure. Sometimes the mere appearance of the riot police units suffices to cool emotions. The helmets, shields, and loud footsteps of the ordered ranks performs the same functions as the flutter of the feathers of the hussars. On 13 December near the University, among the demonstrators, there was a group of young people determined to battle the militia. They had tear gas and riot sticks and they used them. A few of the militiamen in the action were seriously injured. That also caused an increase in the aggressiveness. It is to be regretted that the student security groups that are present during demonstrations of the Independent Association of Students were not present. Those groups guarantee order, and such a violent course of events might not have occurred, as is shown by the event they organized on 17 January 1989."

"What the militia does during a demonstration is lawless," says a representative of the illegal Independent Association of Students, "for its intervention frequently is not based on any stable principles. One can expect an attack when the demonstration is going peacefully as well as when emotions are aroused. There is no rule. In association with the events in December, we published a declaration stating that although martial law has been lifted, its consequences still continue. The seventh anniversary of 13 December passed in Poland under the sign of violent demonstrations that showed how the authorities understand the freedom to assemble and demonstrate. This freedom is guaranteed by the government of the People's Republic of Poland in the Universal Declaration of Human And Civil Rights which it has signed. In view of such actions by the militia everyone has the right of self-defense. I think, however, that the University can in no case become a place for the use of force by any of the sides."

Youth Minister on Proreform Stance, Reform Chances

23000154 Vienna PROFIL in German
No 14, 3 Apr 89 p 48

[Interview with Aleksander Kwasniewski by Erhard Stackl, Poland's Most Reform-Minded Minister: "We Don't Want Trouble at the Roundtable Talks"; date and place not given]

[Text] Aleksander Kwasniewski was born in 1954—a year after Stalin's death, as he likes to point out—in Bialogard in northwestern Poland. He studied economics in Gdansk and has been minister for youth and physical culture since 1985. In October 1988, at the age of 34, he was appointed chair of the interministerial

"political committee" to explore new directions in ideology. As a simple party member he represented the government at the "Roundtable Talks" in negotiations about Poland's future pluralistic political system.

PROFIL: The opposition compares you to Imre Pozgay, Hungary's leading reform politician. Does this comparison surprise you?

Kwasniewski: A little bit, although I sort of like the comparison because Pozgay—just as I am—is convinced that deep reaching reforms are necessary. We need conditions under which party reformers can cooperate with the rational opposition. I think it works in Poland, and as for Hungary, I will have the opportunity to discuss this with Pozgay on 12 April when he visits Poland at my invitation.

PROFIL: At the "Roundtable Talks" Poland's state and party leadership wants to get the opposition to share the burden of responsibility. Will you succeed?

Kwasniewski: We have believed for a long time that we must widely increase the basis for governmental support. Prime Minister Rakowski has offered the vice presidency to the opposition, but they refused for fear of losing their identity. The "Roundtable Talks" propose that the opposition be represented in the Sejm and the Senate, the two houses of parliament, because the opposition has made it known that it wants to share the responsibility for the future of the Polish state. In parliament the opposition will have the opportunity to discuss, as well as to block, all future legislation.

PROFIL: But only as a stopgap measure.

Kwasniewski: Any law passed by the Sejm is subject to Senate veto. The law then goes back to the Sejm where a certain majority can override the Senate decision.

PROFIL: The required two-thirds majority will still be made up of communists and their allies, won't it?

Kwasniewski: That is still under discussion. I am somewhat in a minority with my belief that the opposition is a constructive force and will not paralyze the government. The rest of my party is afraid that the opposition is out to orchestrate political confrontations in parliament. In any case, the "Roundtable" is condemned to succeed because without success, reform in Poland is a dead issue.

PROFIL: How about the danger of a break within the opposition that would pit militant antagonists against Walensa's policies?

Kwasniewski: I think that's unavoidable. It is to be expected that Solidarity will develop factions after the elections. In the same way it is to be expected that some in the party will reject the "Roundtable" results. But what really counts is how strong the center will be.

PROFIL: What percentage would you give the center in a free election?

Kwasniewski: Personally, about 60 to 70 percent.

PROFIL: Do you believe that Kuron, or Michnik, or whatever the names of the delegates in the Sejm will be, will vote for President Jaruzelski?

Kwasniewski: You will have to ask them yourself. During the past few weeks I have talked with Kuron and Michnik and they are not only extremely knowledgeable of political matters but are also very aware of our country's past. Maybe they are ready to accept that this transitional phase needs stability because otherwise decisions are dictated by the rabble in the street—and nobody wants that kind of trouble at the "Roundtable Talks."

PROFIL: But the opposition is determined to have free elections. Will the "United Labor Party" PVAP [Polish United Worker's Party] accept a postponement or will it insist on further guarantees?

Kwasniewski: This is obviously only the beginning of a process that is only limited by the stability of our country and Poland's responsibility for the stability of Europe. Apart from that, possibilities will expand year after year. Right now legislation is being passed to allow the free association of groups and to reinstitute independent trade unions. Soon we will deal with the question of new political parties. We want to create the kind of modern state in which citizens can express themselves freely within well established rules. It has been Poland's misfortune in 1980-81 that all its heated political discussions did not take place within parliament and the parties but rather in the factories where they brought production to a halt.

PROFIL: Why has it taken so long for this insight and the "Roundtable" to come about?

Kwasniewski: In 1981 the party announced its willingness for democratic reforms but Solidarity did not seem to get the message. No doubt, Perestroika in the Soviet Union has removed many road blocks—not so much of a political and military but rather of a psychological nature. Many people who have lived longer than I have, have become slaves of their experiences. The Catholic Church today is different than it was 2,000 years ago or at the time of the Inquisition, but the humanistic church of today still retains its symbols and classic texts such as the Gospel. The same is true for socialism—it is adaptable, it can accommodate new conditions. The question is to what degree.

PROFIL: Poland hopes that reforms will attract new investment from the West. Do you agree?

Kwasniewski: The West has been waiting for the reinstitution of Solidarity—it will be reinstituted. The West has

been waiting for an accord with the opposition—it will happen. What more does the West want? [Do they want] us to leave the Warsaw Pact? I was a student in the seventies and I have never accepted the doctrine of the "Iron Curtain." During vacations I have traveled to Germany, Austria, and Scandinavia and I have had friends from there visit me in Poland. But in the West, old-time politicians still put Europe's boundaries at the Elbe or the Oder River. In contrast, our generation is unaware of such borders because we see ourselves as Europeans.

Party Activities Calendar 13-25 February 1989
26000420 Warsaw ZYCIE PARTII in Polish
No 5, 8 Mar 89 p 21

[Unattributed report: "Party Chronicle: 13-26 February 1989"]

[Excerpts]

Meetings of the Politburo of the Central Committee

21 February. The Politburo examined the socioeconomic situation in Poland. It listened to representatives of the PZPR participating in the deliberations of the working groups and subgroups of the roundtable. [passage omitted]

Conferences and Meetings

13 February. In Poznan, there was a regional conference of the first secretaries of factory committees from eight voivodships on the place of the party in the work place after the 10th plenum of the Central Committee. Edward Lukasik, first secretary of the Poznan Voivodship Committee, presided over the deliberations, and Zbigniew Michalek, secretary of the Central Committee and member of the Politburo, and Bogumil Ferencztajn, minister, participated.

15 February. There was a meeting of the Presidium of the PZPR Central Control and Review Commission. The Presidium discussed the tasks and direction for work deriving from the resolutions and position of the 10th plenum of the Central Committee and the state of preparations for the seventh plenum of the Central Control and Review Commission. Kazimierz Cypriniak, chairman of the Central Control and Review Commission and member of the Politburo, presided over the deliberations.

16 February. Stanislaw Ciosek, secretary of the Central Committee and member of the Politburo, met with the leading aktiv of the publications and performance control bodies. [passage omitted]

15-16 February. In Warsaw, there was a seminar of the first secretaries of PZPR university committees in which the heads of the voivodship committee sections for

science and education participated. The seminar discussed the forms and methods of implementing the resolutions of the 10th plenum of the Central Committee in the academic community. Marian Orzechowski, secretary of the Central Committee and member of the Politburo, and Jacek Fisiak, minister of national education, participated in the seminar. Boguslaw Kedzia, head of the Central Committee section, led the seminar.

20 February. Stanislaw Ciosek, secretary of the Central Committee and member of the Politburo, met with the editorial staff of ITD and with a group of journalists from the student press. They discussed the sociopolitical problems of Poland. [passage omitted]

22 February. Leszek Miller, secretary of the Central Committee, visited Warsaw University, where he participated in a discussion with the students.

The party reporting conference at the PZPR Academy of Social Sciences met. Marian Orzechowski, secretary of the Central Committee and member of the Politburo, participated.

In the Offices and Organizations

13 February. The Warsaw Committee discussed the role of the capital agglomeration in developing foreign economic cooperation. Janusz Kubasiewicz, first secretary of the Warsaw Committee and candidate member of the Politburo, presided over the deliberations; among others, Janusz Basiak, head of the Socioeconomic Policy Section of the Central Committee, and Janusz Patorski, deputy premier, participated in the meeting.

The Chelm Voivodship Committee made changes in the organizational structure of the voivodship party office. The number of sections was reduced from eight to four. There were also changes in the problem commissions expanding their authority. Materials for the voivodship reporting conference were also adopted.

The Gorzow Voivodship Committee examined and confirmed proposed documents for the voivodship reporting conference.

In Torun, the city PZPR reporting conference met. Zygmunt Czarzasty, secretary of the Central Committee, participated in the deliberations.

14 February. The Konin Voivodship Committee confirmed the materials for the voivodship reporting conference.

The Radom Voivodship Committee discussed experience in party work over the past years, the results of individual talks, and the tasks deriving from the documents of the 10th plenum of the Central Committee. A resolution on changing the structures of the functions of the Voivodship Committee was also adopted. Now there will only be two sections. The majority of the current

employees of the current sections will be assigned to the service of eight newly formed problem commissions.

The Piotrkow Trybunalski Voivodship Committee discussed the tasks of the voivodship party organization in implementing the decisions of the 10th plenum of the Central Committee. It also discussed the proposed reorganization of the structures of the Voivodship Committee. [passage omitted]

15 February. Boguslaw Kolodziejczak a member of the Central Committee Secretariat and head of the Chancellery of the Central Committee Secretariat, participated in the PZPR reporting conference at the Romet in Bydgoszcz. B. Kolodziejczak also met with young creators of technical successes at the Bydgoszcz Telkom-Telfa plants. [passage omitted]

16 February. The Krosno Voivodship Committee examined the problems in complaints and reports from the people sent to the party offices.

The Plock Voivodship Committee discussed the materials for the voivodship reporting conference.

The Rzeszow Voivodship Committee discussed proposed changes in the structures of the voivodship office in the context of preparations for the voivodship reporting conference.

The Zamosc Voivodship Committee examined proposed changes in the organizational structures of the Voivodship Committee and confirmed the materials for the voivodship reporting conference. [passage omitted]

17 February. The Wlodek Voivodship Committee discussed problems in the dissemination and development of culture in the region. Marian Stepień, secretary of the Central Committee, and Tadeusz Sawic, head of the Culture Section of the Central Committee, participated in the deliberations.

18 February. The PZPR reporting conferences were held in Biala Podlaska, Walbrzych, Olsztyn, and Tarnow. The guests of the conferences were: in Biala Podlaska, Leszek Miller, secretary of the Central Committee; in Walbrzych, Marian Orzechowski, secretary of the Central Committee and member of the Politburo; in Olsztyn, Zygmunt Czarzasty, secretary of the Central Committee; in Tarnow, Jozef Czyrek, secretary of the Central Committee and member of the Politburo. [passage omitted]

Plenums of the Jelenia Gora, Krakow, Lublin, and Siedlce PZPR Voivodship Committees were held. They confirmed materials for the voivodship reporting conferences.

20 February. The PZPR voivodship reporting conference in Przemyśl was held. Kazimierz Cypryński, chairman of the Central Control and Review Commission and

member of the Politburo, participated. Ernest Kucza, head of the Foreign Section of the Central Committee, also participated.

Plenums of the Gdansk and Lodz Voivodship Committees were held. They discussed the materials for the reporting conferences. [passage omitted]

22 February. The PZPR voivodship reporting conference was held in Suwalki. Stanislaw Ciosek, secretary of the Central Committee and member of the Politburo, was a guest of the conference.

23 February. The PZPR voivodship reporting conferences were held in Czestochowa, Lomza, and Tarnobrzeg. Guests of the conferences were among others: in Czestochowa, Zbigniew Michalek, secretary of the Central Committee and member of the Politburo; in Tarnobrzeg, Leszek Miller, secretary of the Central Committee.

The Bialystok, Kielce, and Slupsk PZPR Voivodship Committees met. Their deliberations were devoted to adopting the materials for the voivodship reporting conferences.

24 February. The PZPR voivodship reporting conferences in Konin, Legnica, Skierniewice, Sieradz, and Szczecin were held. Among the guests of the conferences were: in Konin, Zygmunt Czarzasty, secretary of the Central Committee; in Legnica, Marian Orzechowski, secretary of the Central Committee and member of the Politburo; in Skierniewice, Leszek Miller, secretary of the Central Committee; in Sieradz, Wiktor Pyrkosz, member of the Politburo of the Central Committee; in Szczecin, Kazimierz Cypryński, chairman of the Central Control and Review Commission and member of the Politburo.

The Koszalin and Leszno Voivodship Committees confirmed the reporting materials for the voivodship party conferences.

25 February. The voivodship reporting conferences in Bielsko Biala, Chelm, and Warsaw were held. Among the guests at the conferences were: in Bielsko Biala, Iwona Lubowska, member of the Politburo of the Central Committee, and Marian Stepień, secretary of the Central Committee; in Chelm, Zygmunt Czarzasty, secretary of the Central Committee. Marian Orzechowski, Janusz Reykowski, and Zbigniew Sobotka, members of the party leadership, and Jerzy Swiderski, head of the Personnel Policy Section of the Central Committee, and Janusz Patorski and Ireneusz Sekula, deputy premiers, participated in the Warsaw conference, which was opened by Janusz Kubasiewicz. [passage omitted]

The Ciechanow Voivodship Committee evaluated the course of the reporting campaign in the basic party

organizations and the basic-level party offices and confirmed the materials for the voivodship party conference.

Interparty Cooperation

15 February. J. Spielmann, secretary of the Swiss Labor Party, who was visiting Poland, was received by Marian Drzezkowski, secretary of the Central Committee and member of the Politburo. The guest also met with Leszek Miller, secretary of the PZPR Central Committee, and held talks with J. Basiak and A. Czyz, heads of sections of the Central Committee.

24 February. A delegation of the Ideology Section of the PZPR Central Committee, led by Andrzej Czyz, completed its visit to Romania. The delegation was received by Constantin Oltean, member of the Political Executive Committee and secretary of the RCP Central Committee.

SD Official Defines PZPR-ZSL-SD Coalition, Political Aims

26000473 Warsaw *RZECZPOSPOLITA* in Polish
21 Mar 89 p 5

[Article by Jerzy Jozwiak, member, Stronnictwo Demokratyczne [Democratic Party] Central Committee Presidium: "Coalition, but What Kind?"]

[Text] For some time now all the partners in the present ruling coalition have been declaring the need and desire to refine its formula. Are these declarations forced by the pressure of the sociopolitical situation, and especially by the roundtable discussion?

The results so far of that discussion indicate unambiguously that we in Poland are tending toward a new political landscape based on pluralism of politics, associations, and trade unions. There is no doubt that this landscape will be dynamic rather than static. Confining it to the currently existing organizations, or to those whose existence is being demanded by the forces grouped at the roundtable, is realistic only during the first stage of the existence of that pluralism.

But it has to be assumed that the political minuet will be danced properly only when the new constitution and new electoral laws are finally accepted. This is not changed by the fact that a sharp, if slightly veiled, struggle for power is being waged even now. Its outward expression, consolidated in public opinion, is the existence of two opposing sides at the "table"—the coalition-government side and the opposition-Solidarity side.

Whatever the particular legislation that may finally be adopted, there is no doubt that it will be aimed at promoting a far-reaching democratization of sociopolitical life and public institutions, and in particular, providing lasting safeguards for a democratic creation of

decisionmaking power centers and a corresponding system of governance. Such changes have long been championed by the Democratic Party [SD] too.

This makes it all the more imperative, as has been demanded at all the voivodship conventions of the SD, to define urgently and explicitly the principles for the joint creation and implementation of a genuine coalition government. Clearly, this means avoiding a repetition of the bad experiences of the past when the so-called leading role of the party [i.e., the "leading role" of the PZPR] deprived the ZSL [United Peasant Party] and the SD of any real power and reduced them to the role of passive participants accepting all the initiatives and proposals presented to them.

The new formula must be based on two fundamental principles:

- first, on a complete and authentic presentation of the ideological, political, and program identity of each of the partners in the coalition;
- second, on the possibility of broadening the coalition with partners interested in pursuing a common program of action.

Thus the nature of the cooperation among the PZPR, the ZSL, and the SD must be changed. This requires of us in the Democratic Party adopting a new tactical approach.

The formation of a thus understood coalition would require an explicit and properly legislated definition of the role and place of all the political parties in the country. Here, the premises decisive to the success of the roundtable talks should not be disregarded. They may be characterized as follows:

- the accord toward which the participants in the talks aspire hinges on the existence of a safeguard ensuring that the opposition will not resort to ways and means of struggle conflicting with the constitutional systemic principles;
- the PZPR, the ZSL, and the SD assume that such a safeguard is provided by their entire tripartite coalition with its majority bloc of votes in the Sejm;
- the thorough and radical reforms of the political, social, and economic system will be of a gradual nature; in measure with the evolutionary changes, there will be a change in the conditions decisive to the respective viewpoints of the coalition partners.

In view of this, the PZPR, the ZSL, and the SD at the same time are striving to change the system of governance, to define more precisely the values decisive to full political, economic, and social democracy, and to acknowledge that democracy as the foundation of a system in which the individual and the human personality are the highest good. They also are striving to orient

national policy in the direction of creating the conditions for domestic progress and strengthening Poland's position in the world.

The identity of each of the coalition partners ultimately is decided by his participation in defining the abovementioned values. Thus, not only the interests of each partner can be defined, but their positions may be markedly polarized. The coming elections to the Sejm (and to the Senate) [in June 1989] will therefore necessitate learning the meaning of real political struggle, a struggle that had been unfamiliar in the last 40 years to Polish parliamentarianism, and more broadly to the Polish sociopolitical system. That struggle will be waged regardless of whether the future electoral program is or is not the result of a consensus; even if the parties up for election do not make these distinctions, the electorate will anyway distinguish among communists, peasant-party [ZSL] members, Democrats, and the activists of the so-called opposition-Solidarity side. Thus the voters will give their support not only to candidates but also to particular political groupings.

Here it must be plainly stated that the odium of the failures so far of the so-called real socialism rests on the entire tripartite coalition, in accordance with the principle of coparticipation and coresponsibility, regardless of how limited that coparticipation [by the SD and the ZSL] may have been. The paradox of this situation consists in that it benefits only the opposition, because the society blames all the official political power centers, that is, the official parties and the apparatus of state power.

Thus if our three coalition parties which are exercising power and intend to continue to do so, desire to rapidly work out a new and, more importantly still, broadly accepted formula for their coalition rule, priority should be given to focusing efforts on not so much barren rebuttals of the theses of the opposition as the presentation and popularization of our own possibilities for a genuinely effective governance benefiting the citizens.

I am convinced that these theses, which of course have yet to be refined, warrant claiming that "clearing up the preliminaries" if the dispute for power is politically needed. For the time has come for solutions revealing the fundamental distinctions among all the partners in the coalition to start operating in the systemic, political, economic, and social domains. I mean solutions that would orient the thinking and activism of politically organized citizens toward an effective application of reforms and the pursuit of the socially most important aims.

In other words, if the PZPR-ZSL-SD coalition is to develop as the core of the constitutional order of the nation and state, its fundamental values should be reflected in the traits and qualities serving to grasp effortlessly the distinctions among these three parties, including the differences between the SD on the one

hand and the PZPR and the ZSL on the other. A somewhat simplified catalogue of these traits reduces to:

- first, we agree on what serves the good of man and the nation, the development of the human personality, the multiplication of the material prosperity and the moral and psychological well-being of citizens;
- second, our views are convergent on the conditions for the self-fulfillment of the individual, the actualization of his potential, and civilizational growth and progress;
- third, we are in mutual opposition as regards our outlook, which determines the orientation of our sociopolitical thinking and views of the state;
- fourth, we may become opposed to each other (or even: permanently antagonistic) as regards the choice of ways and means of translating into reality our visions of the development of the human personality and the nation and state, and also as regards the political practice of these ways and means.

It is not accidental, after all, that each of our parties appeals to its own traditions and wellsprings, which may differ ideologically and programwise from their own precursors and historic figures, and which may also differ among our parties. It is no accident either that all our three parties deny the existence of what is termed "blank spots in history" [Katyn, etc.], which in the social awareness clearly handicap the possibilities for uniting the basic aspirations and strivings of the entire nation under our aegis.

The reflections and views expressed here are not exhaustive. They rather are concerned with considering the interests of the individual, the nation, the state—and the Democratic Party—in exploring the most effective operating system under present and future circumstances.

These reflections and views prompt postulating as most urgent the drafting of a new declaration on the cooperation between the PZPR, the ZSL, and the SD, for the principles on which this cooperation has been based so far not only are outmoded but also, in the final analysis, impede the process of reforming the economy and the state.

For there can be no doubt as to the need to "equip" the newly evolved leftist coalition for progress with a program of action on behalf of man and by man.

PZPR Voivodship Plenums on Reports Campaign, Personnel, Education

Bydgoszcz: Increased Membership
26000471 Warsaw TRYBUNA LUDU in Polish
3 Mar 89 p 2

[PAP report: "Plenum of the Bydgoszcz Voivodship PZPR Committee"]

[Text] A preliminary assessment of the course of the reports campaign and the approval of materials for the voivodship conference were the topics of a meeting of

the plenary session of the Bydgoszcz Voivodship PZPR Committee.

When it opens that conference the Bydgoszcz Voivodship party organization will have a membership that is larger by more than 4,000 compared with the situation of 2 years ago: its membership now exceeds 80,000. In the course of the reports campaign, as was emphasized at the plenum, a major topic was work with youth, the problem of winning over the best young workers, peasants, and intellectuals to active party work. It was pointed out that the party is being menaced by a generation gap which should not be tolerated, especially given the present situation of thorough social, political, and economic reforms.

The plenum fixed the date of the voivodship PZPR reports conference at 15 March.

Elblag: Party Efficiency Urged

26000471 Warsaw TRYBUNA LUDU in Polish
6 Mar 89 p 2

[PAP Report: "Plenum of the Elblag Voivodship PZPR Committee"]

[Text] The plenum of the Elblag Voivodship PZPR Committee that was held on 4 March examined and approved the materials for the voivodship reports conference announced for 11 March.

These materials place special emphasis on the need to streamline party work and especially to take steps anticipating the unfolding of the social and political situation.

During the plenum the members of the newly established problem-oriented commissions of the voivodship PZPR committee were approved.

Gdansk: Secretariat Changes

26000471 Warsaw TRYBUNA LUDU in Polish
11-12 Mar 89 p 2

[Article by (z.w.): "Plenum of the Gdansk Voivodship PZPR Committee: Personnel Changes in the Secretariat"]

[Text] Specific tasks for the party organizations and echelons ensuing from the position, resolved upon a week ago, of the Gdansk Voivodship PZPR Reports Conference, were the subject of discussion by the plenum of the voivodship PZPR committee on 10 March. The members of the plenum accepted a detailed timetable for implementing the conference's resolutions and designated the persons responsible for specified tasks.

During the second part of the plenum, personnel changes in the Executive Board and Secretariat of the Gdansk Voivodship PZPR Committee were resolved upon. The following were elected by secret ballot: Secretary for Science, Education, and Culture—Prof Mieczyslaw

Kochanowski (55 years old, director of the Environmental Institute); Secretary for Economic Affairs—Henryk Pilarski (47 years old, director of the Hydroster Marine Equipment Plant); Secretary for Political and Organizational Affairs—Wladyslaw Piotr Rajca (48 years old, secretary of the voivodship PRON [Patriotic Movement for National Rebirth] council); and Secretary for Propaganda—Boguslaw Wierzbicki (41 years old, editor in chief of WIECZOR WYBRZEZA).

The plenum expressed its thanks to the persons recalled from posts in the Secretariat and Executive Board for their many years of work and active contributions to the political activities of the Gdansk voivodship party organization.

The deliberations were chaired by Alternate Member of the Politburo of the PZPR Central Committee and First Secretary of the Gdansk Voivodship PZPR Committee Marek Holdakowski.

The plenum lasted an hour and half.

Nowy Sacz: Education Investment Urged

26000471 Warsaw TRYBUNA LUDU in Polish
30 Mar 89 p 2

[Article by Slawomir Sikora: "How To Help Education? Plenary Session of the Nowy Sacz Voivodship PZPR Committee"]

[Text] "Should we continue to try to persuade the public and the authorities that investing in education, showing concern for the living conditions of teachers, is desirable and necessary and in the final analysis beneficial to all?" This question, asked by Maria Wrobel at the plenary session of the Nowy Sacz Voivodship PZPR Committee, devoted precisely to the problems of teachers in the voivodship, has to be answered affirmatively.

Unfortunately, persuasion is still needed for the work of educators to be properly appreciated.

The scope of the problem was presented in the speech by the Chairman of the Nowy Sacz District Board of the Association of Polish Teachers Leszek Gargula. "True," he said, "in Nowy Sacz Voivodship more educational facilities are being repaired and constructed during the present-day crisis than in many previous years, but it also is true that there still exist many schools that are overcrowded and operate under poor conditions and teach on multiple-shift basis."

The material situation of teachers is causing them to feel discontented. In the speaker's opinion, this is resulting in overtime work and moonlighting, which in turn affects adversely the quality of teaching and the personnel selection.

"Is the teacher to confine himself strictly to the duties required of him by the school, or is he also supposed to

be a social activist, a political activist, an organizer of social life in his community?" This question was asked by Jozefa Parol.

Two basic answers were given to it: the older educators supported the idea of the teacher as a social activist, while the younger ones preferred the model of the teacher-specialist.

The 11,000 teachers in Nowy Sacz Voivodship include women, mothers, wives, homemakers, for whom it is difficult to find time to study and improve their qualifications. This issue was discussed by Jan Turek, chairman of the PRON [Patriotic Movement for National Rebirth] Voivodship Council and of the Supreme Committee of the NCPS for Nowy Sacz. In his opinion, too many duties are imposed on teachers.

PZPR Central Committee Secretary Zygmunt Czarzasty, who attended the session, pointed to the need for social commitment by teachers. This commitment is exemplified by the Haniaczyk family of Jablonka Orawska, around whom is centered the cultural life in the community.

The Central Committee secretary stressed that the changes which also are occurring in education can be said to be revolutionary. The principal purpose of education is to combat sham.

This part of the deliberation was summed up in the resolution of the voivodship committee, containing recommendations from the discussion and directions of measures in education for the immediate future.

Next, the session considered organizational matters. Jozef Brozek, first secretary of the Nowy Sacz Voivodship PZPR Committee, resigned from his post in connection with his transfer to work at the party's Central Committee. The voivodship committee members accepted Jozef Brozek's resignation while leaving his voivodship committee membership intact.

Tadeusz Nestorowicz, deputy director of the Personnel Policy Department under the PZPR Central Committee, nominated two persons for the post of new first secretary of the voivodship committee: Witold Bogata, secretary of the Nowy Sacz Voivodship PZPR Committee, and Antoni Raczka, Nowy Sacz Voivode. Voivodship committee members elected Antoni Raczka by secret ballot to the post of first secretary.

Antoni Raczka (52 years old) has a master's degree in Administration from Jagiellonian University. He has been a party member since 1958. Among other things, he had been during 1964-66 the chairman of the Zywiec branch of the Union of Rural Youth, whence he switched to work in the party apparatus. He was secretary of the Zywiec County PZPR Committee, and first secretary of the Limanowa PZPR Committee. Following the administrative creation of Nowy Sacz Voivodship he worked

for the voivodship PZPR committee and voivodship government. In 1981 he was appointed the Voivode of Nowy Sacz.

Pila: Joint Plenum on Agriculture
26000471 Warsaw TRYBUNA LUDU in Polish
30 Mar 89 p 2

[Article by Wladyslaw Wrzask: "A Common Cause and Common Action"]

[Text] How to promote further economic growth? What kind of common action is needed to influence changes in social, political, and economic life? What should be the platform for cooperation? Such were the principal questions discussed at the joint plenary session of the voivodship committees of the Polish United Workers Party (PZPR), the United Peasant Party (ZSL), and the Democratic Party (SD), held in Pila.

The plenum viewed as most important the growth of agriculture and food industry, measures to promote housing construction, and the balancing of the domestic consumer market.

Hence, many speakers proposed laying genuine foundations for the growth of agricultural production and promoting initiatives to expand housing construction and improve market supply.

Pila's agriculture is stagnant, and this too should be considered, declared Edward Lawniczak, a farmer of Cmachow (ZSL). "We must be honest and admit that he who wants to work well also wants to eat well. We farmers desire to produce and are producing despite the numerous obstacles. We wish that someone finally would appreciate us and take steps to get us that assistance which we have for so many years been awaiting from industry, among other places."

"It is time to eliminate the disproportions between town and country," said Jerzy Susek, a farmer of Rychlik (PZPR).

During the discussion, the scanty availability of loans for farmers and the totally inadequate farm insurance system, which farmers are protesting against, were criticized.

The discussion resulted in passing a resolution that defines more precisely the tasks and the forms and methods of cooperation among the voivodship echelons of the PZPR, the ZSL, and the SD.

Central Planning Chief on Difficulties in Economic Planning

26000436 Warsaw PRZEGLAD TYGODNIOWY
in Polish No 14, 2 Apr 89 pp 4-5

[Interview with Franciszek Gaik, minister-director, Office of Central Planning, by Piotr Aleksandrowicz: "A Rear Headquarters"; date and place not given]

[Text] [PRZEGLAD TYGODNIOWY] Do you think that central planning really exists in Poland?

[Gaik] It does and did, except that it used to be based on an inappropriate concept. Planning was combined with the command-directive system, which anyway had been consonant with the philosophy of that system in those times.

[PRZEGLAD TYGODNIOWY] But is it possible to speak of a planned economy considering that no plan except the 3-Year Plan has ever been fulfilled since World War II?

[Gaik] Indeed, the only correctly conceptualized and fulfilled plan was the 1947-49 Plan. It specified realistic strategic objectives that were accepted by the society, whereupon the necessary resources were consistently subordinated to these objectives.

Subsequently, however, the Office of Central Planning was renamed the State Commission for Economic Planning and assigned completely different duties. The plan became a central directive having a command-administrative nature.

[PRZEGLAD TYGODNIOWY] It may have seemed that "tinkering" could thus promote fulfilling the plans.

[Gaik] At the time the plans were ensembles of objectives formulated by way of negotiation among subsector interest groups. These negotiations consisted in extorting objectives of minimum value and resources of maximum value for achieving these objectives, meaning limited goals and substantial resources. Moreover, in the absence of realistic assessments of the conditions of plan fulfillment, it turned out that the sum total of the discrete objectives was infeasible.

In the 1980's the role and purposes of planning changed markedly and it lost much of its command-directive nature. Unfortunately, however, it still remained a wish list. Yet planning means making rational choices after a thorough consideration of the possibilities for achieving them. In reality, what occurred were paradoxical situations in which a plan began to be revised the very next day after its official approval. The Commission received instructions from outside and tried to follow them instead of making its own analyses, forecasts, and reports and demonstrating the actual possibilities.

[PRZEGLAD TYGODNIOWY] But is it at all possible to speak of planning in a country which is governed not by the laws of economics but by the fiat of high officials, by the Politburo meeting once a week, or by the roundtable?

[Gaik] Under such circumstances, no. Above all, we should investigate the objective possibilities for fulfilling the plan. But before we draft the plan we should gain the approbation of various constituencies as to the choice of objectives, purposes, goals, at what cost, and when?

[PRZEGLAD TYGODNIOWY] Toward the end of 1987 the authorities reached a consensus, and thereupon toward the end of January and beginning of February 1988 overnight political decisions tripled the size of the compensation payments [compensations for price increases], etc.

Nowadays it is likewise possible for the participants in the roundtable to agree on such or similar socially painful measures, whereupon a couple of months later they may rescind their agreements.

[Gaik] I repeat, a consensus on objectives and their feasibility should be achieved already in the plan assessment stage. Only then can a plan begin to be built.

Secondly, agreements have to be stable. The plan should be protected against demolition by a single and sometimes irresponsible decision. If a single brick is removed from a structure, it is no longer intact and may collapse. Bold development strategies must be perceived and created, even if attaining them were to be at the expense of some short-term inconveniences. Yet we are so often prone to demolish the entire plan design for the sake of a spectacular short-term accomplishment. In the past, and repeatedly within this institution, plans would be built and then collapse after single bricks were removed.

[PRZEGLAD TYGODNIOWY] I do not mean just the former Planning Commission. Do you agree with the idea that to this day a single signature can change a great deal in this country; I mean an emergency powers decree, an official regulation, that kind of things. In the developed countries planning is merely a complement to the market mechanism.

[Gaik] True, but the philosophy behind the reforms in Poland is oriented precisely toward a planning-assisted market economy. The problem is to fill the space between the market and the plan with certain forms of state interventionism rather than with central, administrative decisionmaking. In France the mechanism of state interventionism merely orients enterprises and the economy toward adopted strategic objectives.

[PRZEGLAD TYGODNIOWY] You refer to France, where planning was indeed a strong factor, but in the last

few years the importance of planning there has been markedly diminishing, because it was found that it impedes economic growth.

[Gaik] Yet, planning does exist and economic trends such as unemployment are being monitored, forecast, and taken into account. Counteracting them consists in correcting the market mechanism with the aid of a kind of deliberate intervention by the state as envisaged in the plan.

[PRZEGLAD TYGODNIOWY] Professor Cezary Jozefiak claims, however, that linking planning to the market is utopian. Either an economy is a market one with elements of intervention or it is a nonmarket, planned, command, etc., economy.

[Gaik] The operating concept of the new economy has been based on combining the market mechanism with strategic planning. The market mechanism should contribute to the implementation of development forecasts.

Consider also our starting point, our economic structure, and the potential consequences of any immediate marketization of the economy. Given the overmonopolized and closed nature of our economy, these measures would result in hyperinflation, nothing more.

[PRZEGLAD TYGODNIOWY] We are speaking of planning, market mechanisms, abandonment of tinkering by fiat. In this connection, how do you view the so-called special degrees granting clear rights to individual [economic] experimentation, making possible economic [individual, enterprise] autonomy, and suspending laws. After all, this means making the economy anarchic instead of establishing stable rules of the game, under which planning and forecasting make sense. Furthermore, consider what happens when a factory is shut down without first investigating the cost and consequences of that decision, or when the production of hundreds of thousands of motor vehicles is announced and an international agreement violated without knowing whether the economy can at all afford manufacturing such a number of motor vehicles. Elsewhere, a profitable enterprise is formally shut down in order to be leased on the same day to its manager. I am not trying to discuss these individual instances of themselves; my point rather is the conceptual weakness of such sudden and in a way arbitrary decisions.

[Gaik] I personally am not that much bothered by that suddenness. An overall change in philosophy of action has taken place in the economy and the measures taken must be monitored, corrected, and refined in time. Of course there exist instances, sporadic anyway, in which decisions are made before a program of action is developed, but at least now we are gaining time which we lack and which cannot be bought at any price. To be sure, a too radical switch to the market system also harbors, as

we mentioned before, some dangers. Therefore, economic experiments should be viewed as a kind of "economic and social laboratory" in which new solutions, structures, and social attitudes and behavior are developed and tested. The good ones should be consolidated and propagated and the bad or dubious ones discarded. But that has to be learned. Economic experiments mean above all the human element, the intellectual and material resources, and... the desire of people to be the subject not the object. This should not be feared. Lastly this means a change in the mentality of citizens, namely, their awareness that they can make a choice on the market.

Previously it was always the state that made the choice for the citizens. Now it is the market and the citizen as the subject of the market that are to take the decisions. Not everybody likes this. Not all the enterprises either are prepared to make choices in a market milieu.

[PRZEGLAD TYGODNIOWY] In my opinion the weaknesses of both planning and economic management are rooted elsewhere, namely, in a common lack of respect for money. There is neither financial planning nor imagination of the consequences of colossal deficits of the budget, the credit plan, or the balance sheet of personal expenditures and incomes. Money is being produced—literally produced—as the need arises.

[Gaik] I agree that we should not speak of quantitative or material planning. That must be abandoned and instead a coherent and integrated system of financial plans should be developed, with the material picture to be derived as a consequence and a potential. The choice of objectives must be based on their financial feasibility. Then we could speak of the price of choices and measure it by "good," meaning strong national currency.

For example, the Central Annual Plan looks doubtful because of the present approach to it. After all, the budget decree is a sufficient form of fulfilling the annual plan. Similarly the 5-year plan must be of a different, strategic-corrective nature in which emphasis on quantity should not be supreme.

[PRZEGLAD TYGODNIOWY] Fine, yet it was not the previous but the current Administration, one of which you are member, that had prompted the Parliament to approve plans which show no respect for money. You, like your predecessors, knuckled down to the pressure of otherwise justified objectives, expectations, etc.

[Gaik] Well, since very recently. But in this connection I think that a plan lacking a budget deficit would be a pipe dream under the present economic circumstances and in the present social situation. And this is precisely what the present government does not want. And as for the pressure of "justified" objectives and expectations, these are after all a fact and you as a representative of public

opinion know it best. Anyway, it would be premature to say that the government has knuckled down to that pressure.

[PRZEGLAD TYGODNIOWY] But don't you think that before drafting plans the possibilities of the economy should first be determined and described in financial terms?

[Gaik] That is so, and that is what we intend to do. We want to reconnoiter and explore, describe, and analyze the possibilities and only then begin to formulate economic and social objectives and submit them for assessment and consultation to various constituencies and public structures and only thereupon make acceptable choices.

[PRZEGLAD TYGODNIOWY] Your predecessors said exactly the same thing but the effects were the opposite. The financial documents of the present Administration demonstrate that this philosophy still persists.

[Gaik] There are certain arrears, obviously. However, we at the Office of Central Planning face the need to change the approach to the purpose of planning and plans. Hence, changes are taking place, in the sense that tinkering decisions will no longer be taken.

[PRZEGLAD TYGODNIOWY] But would not it be more convenient for you as the head of the Office of Central Planning to act independently of the government?

[Gaik] I would like the Office of Central Planning to be a body indicating the possibilities and proposing rational choices.

[PRZEGLAD TYGODNIOWY] This still does not answer my question.

[Gaik] The CUP [Office of Central Planning] should consist of a team of professionals concerned with the theory and practice of planning and aware that a plan is not a command regardless of the situation of the CUP within the structure of the government. The CUP should be the government's rear headquarters and one of its intellectual resource.

[PRZEGLAD TYGODNIOWY] Please, we are talking about theory and planning, but don't you need a dose of humility in the awareness that not all can be planned but much can be foreseen?

[Gaik] The public views the idea of planning pejoratively, and I am aware of this. After all, it used to happen that assessments of plans *ex post facto* could not resolve the question of what the point of these plans was. Humility toward economic matters is needed, and substituting planning with forecasting of development is greatly needed as well. I do feel that humility *vis a vis* actual economic matters.

[PRZEGLAD TYGODNIOWY] In this case, what will the Polish economy be like this year, in 5 years, and, say, in 15-20 years? What do you forecast?

[Gaik] I think that the year 1989, during which inevitable problems relating to inflation and market imbalances will persist, will nevertheless be a turning point. If "Freedom, Equality, Competition" is to become more than a slogan, which after all is not up to the government alone, we shall be consistently retreating from direct intervention in the economy and rescinding all restrictions. As a result of this turnabout, some economic revival may take place in 1990 and the subsequent years and, in this connection, market mechanisms will begin to operate in a manner stimulating the economy. Successive hard-currency, capital, supply, and labor markets will arise. This will provide yet another impetus for economic revival. Thought stereotypes will be smashed. The State and its institutions will act not as an interventionist but as a sovereign [as published], a commentator, and an arbiter on the economy.

[PRZEGLAD TYGODNIOWY] And looking 20 years ahead, what is awaiting our children?

[Gaik] If the creation of the new system does not collapse, if we shall have competition not only in the economy but in the political and social structures, then the citizen will fully become the subject rather than the object and prospects for young people will be more favorable than we perceive them at present.

[PRZEGLAD TYGODNIOWY] But I have a different forecast—for 5 years ahead. The market imbalances will continue, with the situation fluctuating. The annual inflation rate will range from 40 to 100 percent. There will be no convertibility of the zloty, and living standards will improve only insignificantly. I call this the continuation variant. Is such a forecast, too, conceivable to you?

[Gaik] Yes, if social and political unrest were constantly to recur. But if social consensus is reached on particular choices, at least within the next 5 years, and if, as I do not doubt, the economy will be opened to the world, then, although much cannot be accomplished within that relatively brief period of time, we will have a definite chance to revive the economy.

Transport Minister Outlines Communications Modernization Plan

26000440 Warsaw PERSPEKTYWY in Polish
No 11, 17 Mar 89 pp 14, 18

[Interview with Janusz Kaminski, Minister of Transportation, Navigation, and Communication, by Jerzy Z. Lessmann: "Too Good To Be True" surtitled "2,000,000 New Telephones in the Next 5 Years"; date and place not given]

[Text] [PERSPEKTYWY] Congratulations on your good humor, Mr Minister! The Prime Minister has declared that the economy is on the brink of the abyss, yet you are predicting a turnabout in the spread of telephones in this country: 2 million new subscribers in the years 1991-95.

[Kaminski] Let us not spread defeatism. During the 5 years of the worst crisis we scored the greatest progress in railroad electrification. This did happen.

[PERSPEKTYWY] That is true.

[Kaminski] Aha, you see. It was then, too, that many of your fellow reporters claimed that it was impossible owing to the scarcity of raw and other materials and the abundance of good intentions alone.

[PERSPEKTYWY] But now the matter is more complex. The dynamic of the development of telephones means a veritable industrial, technological, and organizational revolution, whereas expanding the electrification of railroads required only intensified effort and not such a revolution, and everything needed for that electrification was being manufactured by Polish factories.

[Kaminski] Agreed! So there will be a revolution! New technological lines, new generations of equipment, new thinking.

[PERSPEKTYWY] Thinking is easy, but where to get the money for all that? You calculated that more than a trillion zlotys, including about US\$400 million, will be needed, but my common sense tells me that in reality half a billion of those greenbacks [US\$] will be needed. This is a pipe dream. The economy is cracking at the seams and there are shortages of everything, but you, Mr Minister, desire such huge funds. Should not foreign offers be considered instead?

[Kaminski] Hold it, hold it. The calculations have been thorough, please consider: a little less than US\$400 million will be needed, and I do have the collateral for it, namely, first of all, the assets of Polish Post, Telephone, and Telegraph and of industry.

[PERSPEKTYWY] You think that industry is so anxious to offer its reserves of hard currencies when it itself is constantly in search of them?

[Kaminski] Everything has been settled with industry. Nothing is happening without the assent of enterprise managers. And I have their assent. The entire operation will be closely coordinated by our ministry and the Ministry of Industry. The factories manufacturing cable and building telephone exchanges and other telecommunications equipment will undergo extensive modernization and start to manufacture state-of-the-art products. We are negotiating on this matter with several foreign companies.

Many factories of the cable and telecommunications equipment industry are exporting part of their output. If they want to hold on to their share of exports in this rapidly changing world, the world of the new generation of high technology, they must commit themselves, and their own capital as well, to adapting themselves to these

changes. And therefore, we are not getting any free ride from industry; rather this is symbiosis—the vessels are joined.

[PERSPEKTYWY] Are our telecommunications profitable, like elsewhere in the world?

[Kaminski] Of course. Otherwise they would be nonexistent. Here a major factor is the foreign-exchange revenues from international connections. To augment them as soon as possible, we shall expand the international dial exchange in Warsaw and build another in Katowice. The point is that owing to limited capacity many connections cannot be effectuated. And that means measurable losses of United States dollars in revenue.

[PERSPEKTYWY] Just how big is the revenue of the Polish Post, Telephone, and Telegraph in those dollars?

[Kaminski] It is small. Much too small to finance modernization on our own.

[PERSPEKTYWY] But specifically how much?

[Kaminski] Let us say about US\$15 million annually.

[PERSPEKTYWY] What about the future?

[Kaminski] In 2 years we shall have a new international toll exchange. This will serve to double the number of telephone conversations between Poland and the world.

[PERSPEKTYWY] So much has already been said about building that exchange. Yet, once a person travels abroad it is a big hassle to telephone Poland.

[Kaminski] Try to look a little through rose-colored glasses. The situation is not as black as it seems to you. Last year alone the number of telephone connections between Poland and the FRG, that is, along a frequently used route, was markedly increased, by as much as 150 percent from Poland to the FRG and 30 percent in the converse direction.

[PERSPEKTYWY] Every cock crows on his hill. You too, Mr Minister, want to score.

[Kaminski] I do not have to look hard for it. I calculate it thoroughly. Let us stop deluding ourselves into thinking that we can attain major accomplishments by improvising. Well, as I said, we are speeding up maximally the expansion of the central exchange and of international traffic. This is one source of foreign exchange. Another source is industry's own funds. Altogether, this should provide us with US\$300 million over 7 years. This means that we will still be US\$100 million short of the goal. In view of this, at a session of the Economic Committee of the Council of Ministers I proposed that the missing amount be allocated to us by the state from its foreign-exchange reserves, also over a period of 7 years. My proposal was approved. This is because the

development of modern telecommunications systems and the attendant computer networks is unusually important to not only modernizing our economy but also our everyday life. This is the "to be or not to be" of a modern country, a modern nation.

There even exists a proposal for establishing a Bank for Communications Development, a joint-stock company with shares to be also held by legal entities and individuals both in this country and abroad.

For the next 2 years it is industry that will get the most funds. It is there that we must begin our offensive.

[PERSPEKTYWY] All this looks pretty on paper. It always does. But what about specifics? Will industry succeed in mastering new kinds of production within such a brief period of time? Its experience in this respect has not always been the best. And what then?

[Kaminski] This new production has to a large extent already been mastered by industry. After all, we are making modern electronic telephone exchanges. They are built by TELETRA Plant in Poznan. However, it produces not that many of them—enough for 100,000 numbers a year, whereas we want to produce a million annually. Moreover, we are manufacturing fiber-optic cable in Poland. At what rate? This year, 200 km of fully equipped cable, but by 1991 we will be making as many as 2,000 km.

[PERSPEKTYWY] Mr Minister, although you are a pragmatist, you also are an optimist. But on principle I am a skeptic. In 1987 I wrote about the installation of the first fiber-optic lines in Warsaw. They were built quite well, but so far they have not been put into operation owing to a shortage of the diodes converting light signals to electrical ones.

[Kaminski] I do not want to involve myself in the polemics on this particular and discrete matter. This does not affect the consideration that only a general offensive to expand and modernize our telecommunications will serve to undertake broad organizational and production measures. Otherwise we really will only be marking time. And the truth is that unless we take immediate steps to modernize, in a couple of years we shall be unable to maintain telecommunications links with West Europe.

[PERSPEKTYWY] So far you had almost convinced me about your project and I could conditionally believe that you will succeed, but now let me ask you a loaded question: where are you going to install those hundreds of new exchanges? Who will erect quickly the buildings to house them?

[Kaminski] We posed this issue clearly to voivodship governors: if any of them want their voivodships to be provided with modern telephones, they must build the facilities for accommodating the equipment and assist

industry in expanding the needed manufacturing space. Unless there is housing for them, there will be no exchanges, and hence also there will be no telephones in homes and offices. Either/or.

[PERSPEKTYWY] That sounds nice but we know how difficult it is, for example, to erect an ordinary small preschool building for a community, although everyone needs it badly. Are not you miscalculating?

[Kaminski] The space must be prepared by each voivodship on its own. Small and lightweight electronic exchanges do not require heavy structural elements and considerable space. And industry will chiefly modernize itself instead of expanding. I refer to the erection of buildings. Were we to proceed from your premise that nothing can be built in Poland, we might as well sit down and start lamenting.

[PERSPEKTYWY] What about the countryside? Are rural dwellers to continue being discriminated against? After all, there exist entire rural tracts lacking even one telephone.

[Kaminski] This is due to the considerable geographic dispersal of potential subscribers and hence also the high cost of the spread of rural telephone service. At present there are 300,000 telephones in the countryside. We estimate that another million telephones should be installed in the countryside. But for the next 7 years we can afford only that second 300,000. But this does not mean that there is no way out. The ZSL [United Peasant Party] is establishing a special foundation for the spread of rural telephone service and the gasification and electrification of the countryside, and there are the financial commitments being made by state farms, farm products processing plants, and the farmers themselves, which will serve to expand this program. This requires not only thousands of kilometers of cable but also special small telephone exchanges and even radio lines. Prototypes of rural exchanges have been built and industry is beginning to launch their production.

This program envisages that by the year 1995 there will be no village without a telephone in Poland. Hence, we are not following the line of least resistance and installing many telephones where that is easy, at the expense of other areas. Rural telephones mean efficient food production and not just personal convenience and safety in the event of emergency accidents. If we want to have food, we must also invest in communications. We bear this in mind.

Last, let me consider your question as to whether foreign bids should rather be considered. I think not, if our calculations are solid. [If we make our own equipment] we can gain the same number of subscribers at a lower cost, and moreover we shall thus expand and modernize our industry. After all, the spread of telephones will not culminate in gaining 2 million new subscribers; it is also supposed to be the great turning point which will open

the still closed doors to the world of the future: telefaxing, fast telexes, information networks, etc. Sweden, where there are 64 telephones per 100 capita, in 1987 spent nearly a billion dollars on the expansion and modernization of its telecommunications. Japan, that magnificent and admirable Japan, is spending US\$7 billion annually on this purpose; the United States, US\$24 billion; the FRG, US\$7 billion, and France US\$5 billion. This list can be prolonged. The world does not stand still and we must prepare the base for further expansion. No single foreign bid can solve anything for us in the long run, and it will only deprive us of the revenues that would help us to progress further.

[PERSPEKTYWY] I admit that you are a realist, Mr Minister. You almost persuaded me, but I must honestly admit that I still have some doubts. Yes, I am not going to stake my career and guarantee with my head to the readers that everything will be as you describe in this interview. Real life is always different.

But all the same, best wishes from our readers and myself for the success of your great undertaking. We are all waiting!

YUGOSLAVIA

Milosevic's Policies, Objectives Analyzed
28000109 Zagreb *DANAS* in Serbo-Croatian
4, 11 Apr 89

[Article by Dr Zdravko Tomac]

[4 Apr 89 pp 28-30]

[Text] The publication of Slobodan Milosevic's book "Godine raspleta" (BIGZ, Belgrade, 345 pages), which contains the author's selected speeches and public statements over the last 5 years, with characteristic titles for each year: 1984—The Yugoslav Crisis Is Acknowledged; 1985—A New Type of Intelligence Is Necessary To Get Out of the Crisis; 1986—Commencement of the Mobilization; 1987—Confronting the Obstacles; 1988—The Movement for Serbia To Be a Republic; and 1989—Commencement of the Disentanglement, offers an occasion to begin to speak analytically and soberly, without emotions and a priori commitments concerning the policy of the Eighth Meeting of the Serbian LC Central Committee, concerning the rallies, the people happenings, the differentiation, the antibureaucratic revolution, the political demonstrations, and counterrevolutions, and concerning everything that in recent years has been contributing and has contributed to the essential change of political conditions in Kosovo, in Serbia, and in Yugoslavia—to begin to speak, then, about the policy of which the metaphor is Slobodan Milosevic, a politician who in a period of a few years has achieved a popularity (positive and negative) possessed by none of our other politicians. It is also an occasion to demonstrate analytically and with arguments from political science what Milosevic deserves credit for and what he does not. It is

an occasion as well to analyze his policy and through the analysis to attempt to answer the question that is being put more and more, not only in our country, but also in the world public: Where is Milosevic going? What are his ultimate intentions?

In analyzing a political strategy in which the key person is indisputably Slobodan Milosevic, I will follow the instructions and wishes of the author of the book "Godine raspleta." In a very short preface, Slobodan Milosevic sets forth what his personal reasons were for deciding on this book, aside from the political reasons. After observing that he wanted to offer authentic documents on his activity and policy not only to those who agree with him, but also to all who do not agree with him, he explicitly says: "So that ideas and themes for which I do not deserve credit, however good they may be, are not attributed to me. But also so that ideas and themes I have worked for, solely because they are good, are not neglected." This is a one-sided instruction, since it is premised on the belief that only good ideas and themes are in the book. In the interest of truth, then, and rejecting a priori division with only the good on one side and only the bad on the other, I will attempt to analyze the main ideas and themes of the book without prior commitment, and to establish only through analysis, and certainly by force of argument, which ideas and themes are good and which ones are bad. Even this brief introduction reveals an essential characteristic of Slobodan Milosevic that runs through the entire book: the mentality of the victor and great confidence that he is completely right, that everything he does and everything he works for is fair, honest, warranted, necessary, great, and splendid. In the context of the crisis, the helplessness, the hopelessness and fear of the future, when every new day is worse for us than the one before, but better than the one that will come tomorrow, this mentality, this self-confidence and vigor have great chances for success. Especially since Slobodan Milosevic uses words and concepts in his speeches and statements which are comprehensible to the ordinary man. The words he uses most frequently in presenting the arguments for his policy are brotherhood, unity, concord, justice, and respect, and he advocates changes which are to be carried out "urgently and immediately." And the words he uses most frequently in describing programs opposed to his own are these: hatred, discord, violence, genocide, treason, resistance, counterrevolution, bureaucracy, and so on. Such terms make Milosevic comprehensible to the ordinary man; there are no dilemmas and contradictions in his speeches; everything is clear and understandable, everything has its cause and consequence, there are simple solutions for all problems that can be carried out "urgently and immediately" under the sole condition of effective and vigorous removal not only of the enemies and culprits, but also the opportunists and waverers who have been frustrating the "urgent and immediate" resolution of all the problems and correction of injustice, especially toward the Serbian nationality, and in the way of building a rich socialist society.

The very title of the book "Godine raspleta" follows from this outlook, since it suggests that the policy of which Slobodan Milosevic is the metaphor is effective, correct, beyond question, that it is a policy of disentanglement which leads to a rich socialism, which through antibureaucratic revolution and correction of the injustices toward the Serbian nationality and toward Serbia resolve the essential causes of the Yugoslav crisis.

Since one of the chief objectives of the policy for which Slobodan Milosevic is the spokesman is to solve problems "urgently and immediately," many of that policy's ideas and themes must be analyzed and answers must be made to the questions: How is it for us today? How much closer have we come to disentanglement? Has the policy of the Eighth Meeting of the Serbian LC Central Committee, which was followed by the people happenings, the rallies, the antibureaucratic revolution, the turnover of personnel, the unification of Serbia, led to disentanglement or to new entanglements and conflicts, have these really been years of disentanglement, as the book's title suggests, or have these been years of new entanglements and confrontations?

Just as often "the road to hell is paved with good intentions," so every policy must be judged not only by what it wants, what it aims for, but also by what it has achieved, what objectively is the result of that policy regardless of subjective intentions. Indeed, the author himself feels that soon people will be looking for the results he has promised and that deterioration of the situation cannot be justified forever by the action of increasingly numerous enemies and unscrupulous coalitions. That is why he speaks in the last part of the book about results, even attempts to portray the situation even in Kosovo as being better than it is, asserting that the first results are already evident.

However, it is obvious, and this can be taken from the assessments of all forums, that there have been no results except the change in the Constitution and the unification of Serbia (at least constitutionally), but there have been casualties and there are processes and confrontations that offer an uncertain future for Kosovo, for Serbia, and for Yugoslavia. History will record that the unification of Serbia was accompanied by big parades and demonstrations in a euphoric mood, but also by great conflicts and human casualties and by the transformation of Kosovo into a zone dangerous for the lives of all those who live there as well as to the police forces which are supposed to guarantee some kind of tolerable life.

Reduction

The abundance of various possibilities, the rich spectrum of colors, and the pluralism in the life of ideas and conceptions are in most of the statements of Slobodan Milosevic reduced to one single truth, to black-and-white representation, to a bipolar interpretation of the world: to light and dark, heaven and hell, good and evil, friend and enemy, to just two possibilities (to be or not to be).

On the one side (headed by the author) are the democrats, the fighters for unity, brotherhood, concord, justice, respect, changes, equality, rich socialism, and so on, while on the other is the "unscrupulous coalition," the enemies, the opportunists, the counterrevolutionaries, the protagonists of discord, hatred, genocide, the traitors, the anti-Communists and enemies of all stripes who are standing in the way of the urgent and immediate triumph of justice and respect, who are standing in the way of achievement of democracy, freedom, and equality. To tell the truth, the observation must be made that the opponents of Slobodan Milosevic's policy are in fact more and more accepting his reduction of the world, that they are behaving the same way, seeing in Slobodan Milosevic's policy everything which he has been attributing to them, but attributing to themselves the attributes with which Milosevic as a rule expresses his own policy. Evil is the others, that is a policy which prevails today in all regions of Yugoslavia and which is a good excuse in all the republics and provinces to escape responsibility for the situation in one's own community and in Yugoslavia. At a time when there are fewer and fewer crusts of bread and the future is more and more uncertain, a policy of ethnic homogenization, indeed even a policy which borders on nationalism, is being applied more or less in all communities as a means of holding power. Those who have been criticizing Milosevic the most, then, are as a rule taking the same political position which they are criticizing.

This division of society into friends and enemies, into the good and the bad, is the basis from which follows the main strategy for carrying out Slobodan Milosevic's policy, the necessity and utter justifiability of using every means to strike and finish off the enemies who are hindering the triumph of justice, concord, brotherhood, and unity, but not only the enemies, but also the opportunists, the waverers who are doubtful about the absolute justifiability of the "revolutionary course," who call attention to the reduction of complicated problems, to the "easily promised speed," and who call for the warranted objectives to be achieved with the fewest possible casualties. That political strategy can explain many things which have happened and which are happening in carrying out the conclusions of the Eighth Meeting of the Serbian LC Central Committee, that is, the assurance that all means are permitted in achieving justice and truth and in correcting inequality: "Through institutions and bypassing institutions, according to the bylaws and bypassing the bylaws, on the street and indoors, populism and elitism, documented and undocumented," all of it is legitimate and legal, democratic and revolutionary "if it is clear that it is a policy for a Yugoslavia in which there will be unity and equality and life will be richer and more civilized," that is, as Milosevic says: "For a start and above all in harmony." This is a policy, then, which does not respect the state based on law and legal norms, this is a policy which itself sets down the rules of the game and its objectives depending on a political evaluation. This is a policy which does not believe that in accomplishment of its objectives it needs

to spend a great deal of time worrying about procedure, "it traps big and small, great and small tricks, intrigues, and ruses."

For that policy, everything is permitted in achieving the goals that have been set in the name of the people, there are no restrictions whatsoever in carrying out the will of the people, if it cannot be done through institutions and on the basis of the Constitution, the institutions can be bypassed and the Constitution ignored, so that the policy of a state of emergency has been fully legalized, even idealized, since the people governs not through and by means of constitutional institutions, but around them and against them if the political assessment is that this is a contribution to carrying out the policy of the revolutionary course whose absolute correctness is not doubted.

This is a policy of revolution and of revolutionary objectives, a policy which places the revolutionary will and objectives above the legal state, constitutionality, and legality, since the people does not rule through and by means of the legal state, but directly, acting through the political leadership and the leader who evaluates and assesses, who grants or takes away legitimacy on the basis of an assessment whether a particular act contributes or does not contribute to accomplishment of the "revolutionary course." Everything that supports the "revolutionary course" is justified regardless of whether it is institutional and legal, and everything that contests it or jeopardizes it or merely impedes its realization is illegitimate and counterrevolutionary.

Slobodan Milosevic's speeches show that he believes that such a policy is justified and revolutionary and he pleads for it sincerely and with conviction. On the basis of that kind of political conception it is logical to him that bringing down the legal leadership in Vojvodina, for example, in a manner that bypassed institutions and bylaws, is not only justified, but indeed the very essence of a democracy of historic importance, while every expression of the will of the people, say, in Slovenia, is undemocratic and anti-Yugoslav.

Violated Rules

That kind of policy is not new in the history of the working class movement; for a long time in fact it was proclaimed to be the only correct one, and even today it has a great deal of support among us throughout Yugoslavia. To tell the truth, it should be said that every revolution, as well as every counterrevolution, is a destruction of the existing legal system and institutions of the political system, that revolution and counterrevolution differ in the content of the political program, but not in their method, since both want to change the existing system and establish a new situation and new institutions by political force. Since many people assert even today that there is an ongoing revolution in socialism, all advocacy of a state based on law and established rules of behavior are seen from that standpoint as

conservative and as a struggle for the status quo. In that context, many statements of Slobodan Milosevic advocate very openly and clearly the idea that the legal and political system based on the 1974 Constitution should be changed by every means and that those who defend that system, the so-called advocates of a state based on law, are counterrevolutionary, since they want to preserve a system which is bad and unproductive and has been generating the crisis.

The advocates of a state based on law, of constitutionality and legality, of adherence to the bylaws and the firm rules of the game, are in Milosevic's conception standing in the way of necessary revolutionary changes, and that is why they should be removed from the scene by an antibureaucratic revolution. That requires revolutionary changes, rallies, and a general turnover of personnel by will of the people. Although the division into advocates of revolution and advocates of a state based on law is well known, although in all present-day socialist systems today we encounter similar roles and polarizations of various forces, in the political struggles in Yugoslavia, which will decide whether Yugoslavia will develop in the direction of a socialist state based on law, a market society, and political democracy and political pluralism, or in the direction of strengthening the state based on the party, centralism, and monism, there nevertheless are highly specific features. In our country, the leaders of the revolution, that is, the leaders of the antibureaucratic revolution, hold essential official positions in the institutions of the system which they do not recognize and are tearing down precisely by developing a broad popular movement, which outside the institutions and the rules of the game is changing the system itself. It is hard to get one's bearings in such a situation, since defense, say, of the Constitution still in effect and of its foundations is sometimes equated with counterrevolution, and burning the Constitution at the stake is equated with revolution.

In that conflict between advocates of the state based on law and the state based on the party, between advocates of political pluralism and advocates of monism, all the rules of the game have been overturned, and this is one of the main causes of the crisis, since in certain parts of Yugoslavia a policy of revolutionary violence prevails, while in others the rules of the state based on law prevail.

A politician's ethics are an essential question of every system, since the politician is the legal and legitimate holder of power, since the political vocation is the only one that makes it possible through legal violence, that is, by the use of political power on the basis of law, to take away the property, the freedom, and indeed even the life of another man. That is why in all civilized systems, regardless of the type of social system, there was and is insistence that the use of power be subject to public scrutiny, that it be formalized by laws and standards, that it be restricted by procedure, so that the subjective will and arbitrariness of the holders of power do not make it possible to violate the principle that everyone is

equal under the law both when it is penalizing and also when it is rewarding. All modern states have a state based on law, which guarantees even with political force the enforcement of the law and the established rules of behavior, in which the will of the people is accomplished by means of political democracy. That is why the question of violating the bylaws, of violating procedure, of making decisions on the basis of the established norms or applying the principle that revolutionary interests are sufficient for the will of the people to be realized regardless of all the established rules and procedures, for some to be rewarded and others penalized for the identical behavior depending on the balance of political power in a particular case, cannot be a mere formality.

And in that context many people are disturbed by a politician who not only declares, but in fact effectively carries out a policy which he formulated in his now famous statement at the 20th Meeting of the LCY Central Committee, which was this: "This meeting has been awaited as a meeting of conflicts and differences. They should not be feared. They are inevitable if the obstacles are to be removed, if a solution is to be found. But that solution will not be brought by a procedure, by its traps great and small, by large and small tricks, intrigues, and ruses. The decision will be made by a policy to which a majority of the people of this country has committed itself, through institutions and bypassing institutions, through the bylaws and bypassing the bylaws, on the street and indoors, through populism and elitism, documented and undocumented, but in any case so that it is clear that it is a policy in favor of a Yugoslavia in which people will live in unity and equality and life will be richer and more civilized. But for a start and above all in harmony."

Love and Hate

The division of society into friends and enemies had to result in the present situation in Yugoslavia, in which the processes of political divisions in bipolar fashion are now coming to an end: for and against the policy of Slobodan Milosevic, since his policy does not allow for partial acceptance or disputation. That is why many analysts, both those who are committed to Milosevic and those who are against him, say that one of the results of his policy has been a dual unification: unification of the great majority of the Serbian people and a considerable portion of the Montenegrin people around the program of Slobodan Milosevic, and unification of a considerable number and indeed even majority of the members of the other nationalities of Yugoslavia against such a policy. His policy leads not only to a bipolar division, but even to an extreme attitude toward the person of Slobodan Milosevic and the policy of which he is the indisputable metaphor.

Slobodan Milosevic is today the only politician in the world toward whom so much love and hate is expressed in a single country. Many people are even today treating him as a legend, as a savior, the gusle players sing about

him and songs are being recorded which become hits, songs are being sung to him such as our people sang only to Comrade Tito. I will quote the lines of the very popular song entitled "Slobodane, milibrate" [Dear Brother Slobodan], since these lines express in a manner comprehensible to the people the cause of Slobodan Milosevic's great popularity among the Serbian and Montenegrin people, since he has become a savior who will resolve the Kosovo drama. The lines go like this:

"Let us all live in harmony Slobodan, help out. Let us all live in harmony Oh, Serbia, help out. Slobodan, dear brother your brothers beg you to help us, brother Slobodan We can no longer hold on down here. Our elders died on Kosovo Polje and so will we, if need be for our Serbia. We your brothers and sisters are still being persecuted Help us, brother Slobodan You are our father and mother. Kosovo will be ours So long as there are Serbs. Kosovo has since time immemorial Been our homeland."

Another reason why we have quoted this song in its entirety is that it reveals in a simple and comprehensible way why the Serbian national movement led by Slobodan Milosevic has managed in a short time to achieve such a high degree of ethnic homogenization and a unity in which all differences and divisions are forgotten. A prerequisite of the success of a policy of ethnic homogenization lies in finding a common denominator which can bring together widely differing members of every nationality, which is made up of highly different individuals, Communists and anti-Communists, believers and atheists, good people and bad people, conservatives and progressives, young people and old people, rich and poor, and so on.

That common denominator must be a principle which is above every individual interest. That is why the best and most effective means of ethnic homogenization is the threat to the existence and freedom of the individual as a member of a particular nationality. That common denominator is Kosovo and the position of Serbia in Yugoslavia and the widespread belief among the people that there is an organized coalition and strong anti-Serb forces which are thwarting not only the equality and freedom of Serbs and Montenegrins in Kosovo, but also the Serbian nationality in Yugoslavia. The ethnic homogenization is all the greater the greater the danger (whether real or created) from a strong enemy threatening the existence, freedom, and equality of the nationality or individual members of that nationality. In such situations, all differences between members of the particular nationality become inessential, in a case of hysteria or real danger to the survival and freedom of the nationality, there is union between the thief and the policeman, the rich man and the poor man, the Communist and anti-Communist, those who wear communist symbols and those who wear symbols of Saint Sava, who otherwise are embittered ideological enemies. When such a situation has been brought about, a great emotional charge is built up, and more and more people make choices on the basis of emotions rather than reason

and the facts. That is why it is not surprising that many people not only see Slobodan Milosevic as a new Tito, but are even proposing changes in certain forums so as to facilitate that (bringing back the individual presidency of Yugoslavia for a 4-year term, and that president would have to come from Serbia). There are many reasons why Slobodan Milosevic is not and could not be a new Tito, but just one is sufficient. A new Yugoslav leader like Tito, if all the other historical and political conditions existed for such an individual to rise up, and they obviously do not obtain, could not be a man whose program is an ethnic program, who has gained his popularity, but also his unpopularity, with a policy expressed by a slogan that is being heard more and more loudly not only in political rallies, but also in sports stadiums: "Slobo, Serb, Serbia is with you." If all the other conditions obtained, only a person to whom all the nationalities and ethnic minorities in all parts of Yugoslavia chanted "Yugoslavia is with you," could become a Yugoslav leader.

I do not mean by this to diminish in the least the many abilities of Slobodan Milosevic as a consummate politician, nor do I wish to deny his many merits and good ideas, for example, concerning the economic reform, nor do I think that he is a passing phenomenon. I merely want to emphasize that he has become what he is precisely by formulating an ethnic program. He has objectively become the national leader of the Serbian nationality regardless of whether he wanted it or not, a leader who, although he is a Communist, has united both the anti-Communists and all others in the movement for the state of Serbia. That is why the policy of Slobodan Milosevic cannot be understood without an analysis of his program on the nationality question, especially on the Serbian nationality question, in the context of political science. However, before that analysis we need nevertheless to say something about the unscrupulous attacks on the person of Slobodan Milosevic, and we do so not only for the sake of balance. This applies above all to those articles which personally insult him and equate him with Mussolini (Slobenito), who proclaim him a new fuhrer or Stalin (for example, Stalinosevic). Drawing that line is a condition for establishing a dialogue in which it will be possible to overcome the bipolar division, in which criticism and search for a synthesis will be possible, in which we will abandon present divisions. This is necessary if we are to get out of the cliché of love and hate and policies for national homogenizations and emotions in which the past is triumphing more and more over the future.

(The installment in the next issue will discuss the Memorandum as the basis of Milosevic's policy and the new Serbian Constitution as the tardy realization of the 1974 federal Constitution.)

[11 Apr 89 pp 25-27]

[Text] In order to ascertain the essence of Slobodan Milosevic's political conception and strategy we need to analyze his attitude toward the nationality question,

especially toward the Serbian nationality question. Many analysts feel that Milosevic does not have a program of his own, but that he has actually taken over the basic postulates of the Memorandum of the Serbian Academy of Sciences and Arts, which, although never published, is probably the document of greatest importance to an understanding of the Serbian national movement and political processes in Kosovo, in Serbia, and in Yugoslavia.

The Memorandum directed the great dissatisfaction of the Serbian people (to a considerable extent justified) because of the exodus from Kosovo under pressure, because the counterrevolution in Kosovo was not halted, but also for reasons of social welfare and other reasons, very clearly toward the 1974 Constitution and the constitutional status of Serbia as being principally to blame. Not only has the Memorandum had an essential influence on political developments of Serbia, although at the outset it was very sharply criticized by the leadership of the Serbian LC at the time, who later were mainly removed, but gradually many of its phrasings and positions have been stripped of their extremist positions and direct accusations and have become the political basis of a broad national movement and to some extent even of the policy of the Serbian LC and of its leadership, headed by Slobodan Milosevic.

Slobodan Milosevic's meteoric success and the successfulness of his policy, the large changes in Serbia and Yugoslavia cannot be explained unless they are linked to the many objectively existing problems which existed and do exist and which served as the basis of the political platform which was in fact formulated by the Memorandum. The strength of the Memorandum and of its influence lies in the fact that it combined the existence of real problems and bitter truths that had become a part of the consciousness of every Serbian person with fabrications and accusations, so that the average Serb became convinced that these fabrications and accusations were also the truth. For the sake of the truth, it should be said that many of the assessments in the Memorandum are acceptable (for example, those concerning the economic system, the state based on law, and so on) and that many of the proposals and positions have already been adopted in the ongoing reforms. Nor is it in dispute that the Memorandum rightly pointed to certain of the real problems in the constitutional status of Serbia that exist and there is no justification for not resolving them. However, what is in dispute is the explanation of those problems and their overemphasis and even more the accusation which the Memorandum made against our revolution, its leaders, especially Tito and Kardelj, and against the Croatian and Slovene nationalities, accusing them of a deliberate anti-Serb policy and formation of an anti-Serb coalition. Here are a few typical quotations from the Memorandum: "All the nationalities are not equal: the Serbian nationality, for example, has not realized its right to have its own state. Segments of the Serbian nationality, who live in considerable numbers in other republics, do not have rights, by contrast with the

ethnic minorities, to use their own written and spoken language, to organize their own political and cultural institutions, nor to jointly develop the unique culture of their nationality. The unrestrainable driving of Serbs out of Kosovo demonstrates in a drastic way that those principles which protect the autonomy of a minority (the Albanians) have not been applied in the case of a minority within the minority (the Serbs, the Montenegrins, the Turks, and the Gypsies in Kosovo). In terms of the forms of ethnic discrimination that exist, present-day Yugoslavia cannot be considered a modern and democratic state" (p 37).

Domination of Croatia and Slovenia

On the domination of Croatia and Slovenia, one passage states (p 43): "The position of Serbia should be viewed in the context of the political and economic domination of Slovenia and Croatia, which have been the proponents of changes in all the systems to date. Slovenia and Croatia started out at the highest level of development, but they have achieved the fastest development. As their relative position has improved, the gap between them and the rest of Yugoslavia has greatly widened. This course of events, which departs from the proclaimed policy of uniform development, would not have been possible if the economic system had not been biased, if those two republics had not been in a position to impose solutions which serve their own economic interests."

On the lasting unscrupulous and anti-Serb coalition, one passage states (p 44):

"The Slovenes and Croats created their own national Communist Parties before the war, and they also gained decisive influence in the CPY Central Committee. Their political leaders became the arbiters on all political issues during and after the war. These two neighboring republics shared a similar historical destiny, they had the same religion and desire for the greatest possible independence, and being the most highly developed, they also had common economic interests, which were sufficient reasons for a lasting coalition in the endeavor to achieve political domination.

"That coalition was reinforced by the many years of collaboration between Tito and Kardelj, the two most distinguished political figures in postwar Yugoslavia, who, relying on the prestige which they enjoyed in the country, were able to have an essential influence on decisionmaking concerning these matters."

On the revanchist policy toward Serbia, one passage states (p 46): "The revanchist policy toward the Serbs began before the war in that it was felt that the 'oppressor' nationality did not need a Communist Party. Serbs had relatively small representation in the CPY Central Committee, and some of them, presumably so as to stay there, declared themselves to be members of other nationalities. During the war, Serbia was not in a position to take an altogether equal part in the making of

decisions which prejudiced future interethnic relations and the social system of Yugoslavia."

On genocide toward Serbia and the slogan "A weak Serbia means a strong Yugoslavia," one passage states (p 50): "The attitude toward Serbia's economic lag shows that the revanchist policy toward it has not weakened over time. On the contrary, fed by its own success, the policy has become stronger and stronger, ultimately finding expression in genocide. The discrimination against citizens of Serbia, to whom, because of the parity representation of the republics, fewer posts of officials and delegates in the Federal Assembly are accessible than to others, while the voter's vote in Serbia is worth less than that in any other republic or province, is politically untenable. In that light, Yugoslavia does not show up as a community of equal citizens or of equal nationalities and ethnic minorities, but rather a community of eight equal territories. Nevertheless, even that equality does not apply to Serbia because of its special legal-political status, which reflects the desire to keep the Serbian nationality under constant control. The guiding idea of that policy has been 'a weak Serbia means a strong Yugoslavia.'"

On the inequality of the Serbs in Croatia (p 62): "Except for the period of the existence of the Independent State of Croatia, the Serbs in Croatia have never in the past been so threatened as they are today. The settlement of their status as a nationality imposes itself as a paramount political issue. Unless solutions are found, the consequences may be harmful in several ways, not only to relations in Croatia, but also to Yugoslavia as a whole."

On the need to carry out the slogan of ethnic homogenization of the Serbian nationality not only in Serbia, but also in Yugoslavia (p 70): "Establishment of full ethnic and cultural integrity of the Serbian nationality, regardless of the republic or province where it is located, is its historical and democratic right. Achievement of equality and independent development for the Serbian nationality has profound historical meaning. In less than 50 years, in two successive generations, twice exposed to physical annihilation, forced assimilation, conversion, cultural genocide, ideological indoctrination, and to the disparagement and denial of its own tradition under an imposed guilt complex, intellectually and politically disarmed, the Serbian people has been exposed to trials too grave not to have left deep traces in its spiritual condition which at the end of this century of great technological flights of the human mind dare not be neglected.

"If it expects to have its future in the family of cultured and civilized nations of the world, the Serbian nationality must gain the opportunity to find itself again and become a principal in history, must again become aware of its historical and spiritual identity, must clearly examine its economic and cultural interests, and must arrive at an up-to-date social and national program to inspire present and future generations."

On the inequality of Serbia and the nonexistence of the Serbian state (p 71): "But the greatest trouble is that the Serbian people do not have a state such as other nationalities have."

On the need to overthrow the 1974 Constitution (p 72): "The equality of all the republics formally established by the SFRY Constitution has in reality been deprived of value in that the Republic of Serbia has been required to deny a portion of its rights and authority to the advantage of the autonomous provinces, whose status is regulated to the greatest degree by the federal Constitution. Serbia must openly say that this arrangement was imposed on it. This especially applies to the position of the provinces, which in actuality have been promoted to republics which feel themselves incomparably more a constituent element of the Federation than a part of the Republic of Serbia. Aside from not having taken into account the state of the Serbian nationality, the SFRY Constitution also created unconquerable difficulties that stand in the way of its achievement. A revision of that Constitution becomes inevitable if Serbia's legitimate interests are to be realized. The autonomous provinces have to become true components of the Republic of Serbia, in that they would be given that degree of autonomy which would not violate the integrity of the republic and would guarantee achievement of the general interests of the broader community."

What the Future Will Bring

It is evident from the quotations given that the emphasis of the Memorandum is not only on solving the problem of Kosovo, but also on creating a Serbian national movement that will prevent the domination of Croatia and Slovenia, which will destroy their unscrupulous and anti-Serb coalition, which will bring down the 1974 Constitution and will afford an essentially different status for the Serbian nationality, not only by creating a Serbian state, but also by essentially altering the federal structure of Yugoslavia, so that the Serbian nationality can be united as a whole. It should also be said that the Serbian national movement with admixtures of nationalism grew up over long years as a consequence of the counterrevolution in Kosovo and that the Memorandum was only a synthesis of ideas which had been published and propagated in public many times.

Accordingly, Slobodan Milosevic and his policy do not deserve the credit for that movement. Precisely out of a desire to follow the author's instruction in the book's preface, that "ideas and themes which are not his, however good they may be, not be attributed" to him, we must observe on behalf of the truth that Slobodan Milosevic has adopted and varied in his speeches certain of the basic themes contained in the Memorandum, stripped of their extreme qualifiers, especially as applied to Tito, and of other nationalistic and chauvinistic lines of argument. However, its basic themes: Serbia will be a state or will not exist, Serbia has no claim against other republics, but it has claims to its own republic, Serbia

seeks a position equal to that of the other republics, and its determination to solve the problem of Kosovo at any price and with all possible measures and to destroy the "unscrupulous coalition," and many other themes prove that he has incorporated in his political platform some of the ideas contained in the Memorandum, that is, that he has taken over certain ideas which the League of Communists harshly criticized in the initial phase of their evolution. The party leadership and leadership of the state which did not accept the mood created even before the Eighth Meeting of the Serbian LC Central Committee, when politicians emerged who rejected the extreme views of the national movement that was already formed, but accepted its essence, came down like a house of cards.

In view of everything we have said, the question arises what Slobodan Milosevic's future policy will be on the nationality question and the status of the Serbian nationality in Yugoslavia and on the construction of Yugoslavia's federal system? Many people have been putting the question of whether there will be a change of policy after unification of Serbia and proclamation of the constitutional changes which constitute Serbia as a state over its entire territory, whether after accomplishment of his principal objective Milosevic the Communist will commence differentiation from the anti-Communist and nationalistic forces which in the phase of fierce political struggle to achieve the new status of Serbia at any price he not only did not dare to attack, but sometimes even had to use? It is obvious that opinions differ on this question. It is also difficult to arrive at a decided answer by analyzing his speeches and public statements which he has published in the book. It is obvious that there are various possibilities, but it also is still more obvious that the dramatic situation in Kosovo and in Yugoslavia may by its uncontrolled development dictate solutions regardless of the desires of any politician or policy.

I will nevertheless attempt to point to some elements which might possibly give an answer to the question: In what direction does Slobodan Milosevic ultimately intend to go? Some people say, there are quite a few arguments in support of it, that Slobodan Milosevic and the policy he heads are actually a tardy process of realizing the 1974 Constitution, that is, that the change in Serbia in the official status of the national state and thereby in realizing the 1974 Constitution, which he has subjected to harsh verbal attack, is actually the essence. There are many arguments in the speeches of Slobodan Milosevic which confirm this thesis, that is, which show that the slogans about the unity of Yugoslavia, of the working class, of the victory of the class aspect over the ethnic aspect and other slogans are not real, since everything that in practice has been realized in the name of those slogans is actually the reverse—the creation of an ethnic state, the placing of the ethnic above the class aspect, and the declaration that the sovereignty of Serbia and its right to decide its own destiny on its own must be respected. And the slogan "A strong Serbia means a

strong Yugoslavia" in fact shows that the 1974 Constitution is acknowledged, since its point of departure is that there is no possibility of a strong Yugoslavia by abolishing the sovereignty and constitutional rights of the republics. Everything that has been accomplished as the will of the people has been contrary to certain fears that processes in Yugoslavia in actuality desire a centralistic and unitaristic Yugoslavia without the republics as states and without their responsibility for their own development and for the development of Yugoslavia as a whole. In that context, regardless of the manner in which Serbia was officially constituted as a state, it could be the greatest contribution to practical realization of the federalism called for by the 1974 Constitution, since it will not be possible to contest the same rights for other nationalities and other republics which the Serbian nationality has fought for and gained in its own republic. It should be added to this that in Yugoslavia today there has been such an ethnic homogenization carried out more or less in all the republics that it is difficult to anticipate the feasibility of processes in the opposite direction even during the drafting of a new constitution.

This means that it is nevertheless realistic to remain on the foundations of the 1974 Constitution, on consensus and self-management federalism, accompanied by large changes in the economic system, on which there does exist agreement, on which there are no differences.

With Tito Even After Tito

On the other side from this optimistic view of Yugoslavia's future, we should not underestimate the pessimistic view either, and it has many advocates. Many people were frightened by the "people happenings" and other processes in Serbia and threats of advocating or aiding such a "revolutionary course" in other republics as well. The arguments of the pessimists point out that the unification of Serbia is only the first step, a partial objective in a strategy which can be briefly expressed by the thesis (which is also the basis of the Memorandum) that the definitive solution of the nationality question of the Serbian nationality in Yugoslavia cannot be settled solely by the unification of Serbia and by changes in the economic system, but rather it requires an essential change of the federal system and abolishing the present

rights of the republics, accompanied by a considerable strengthening of centralism and the transition to a Yugoslav constitution on the principle of one-man, one-vote and one-member-of-the-League-of-Communists, one-vote, which would make it possible for the Serbian nationality, which is the most numerous in Yugoslavia, to have an essentially different position.

Although such tendencies do exist, I think that it is nevertheless realistic to expect that the political struggles and confrontations will gradually undergo a conversion and transformation into a search for the broadest social consensus on modernization of Yugoslavia and reconstruction of a system that will not threaten the fundamental principles of equality of the nationalities and ethnic minorities. The solution probably lies in a return to the positions of the 17th Meeting of the LCY Central Committee, where a high degree of agreement was reached on social reforms as well as on a value system that can briefly be formulated in the slogan "With Tito even after Tito." With an assurance that reason and tolerance will triumph after all, I will end this reflection on Slobodan Milosevic's book in which I have attempted to seek an answer to the question of what his political conceptions will be and where he intends to go with a quote from his book in which (p 167) he reflects about the foundations of Yugoslavia on the slogan "With Tito even after Tito." "The logical question which is imposed, however, is how we are to look on the crisis we now find ourselves in from the standpoint of Tito's work and our development up to now? Tito's basic conceptions concerning the necessity of the struggle of the working class and ethnic equality, concerning socialist self-management as our system, concerning brotherhood and unity of the nationalities and ethnic minorities, concerning Yugoslavia as the common homeland of all the South Slav nationalities and ethnic minorities, concerning Yugoslavia's foreign policy of nonalignment, are our fundamental commitments. There is no problem of Yugoslav society today as to those commitments not being good, but rather those commitments are being implemented poorly or not at all. And the poor, slow, or difficult accomplishment of some social project or program does not always mean that the idea or program is unfeasible, but often that those who are working to carry it out are not doing a good job of it."

GERMAN DEMOCRATIC REPUBLIC

Essentials of Labor Productivity Increase Examined

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[Article by Prof Dr Helmut Koziolk, member of the SED CC [Socialist Unity Party of Germany Central Committee], rector of the SED CC's Central Institute for Socialist Economic Management, and Prof Dr Otto Reinhold, member of the SED CC and rector of the SED CC's Academy for Social Sciences: "Tasks Aimed at Improving Labor Productivity"]

[Text] Increasing labor productivity, together with raising economic efficiency, has always been a focal point of SED economic strategy; it will remain one. We thereby follow Lenin's realization that labor productivity ultimately is the most important thing for the triumph of the new social order; under the conditions of the scientific-technical revolution, with the conversion to an intensive expanded reproduction type in our country, it has become much more relevant still. To continue our integrated economic and social policies through the 1990's consistently and to cope with other social tasks for further shaping the developed socialist society in the GDR, we need an annual national income growth of some 4 percent. That must come exclusively from higher labor productivity. No other group sources are available to us either today or tomorrow.

With it, we are completely certain that in the confrontation between socialism and capitalism, for further changing the international power ratio, the growth of labor productivity is of crucial importance more than ever. In getting set for the 12th party congress, we therefore have to determine the tasks and conditions, sources, and ways that ensure an increased labor productivity growth.

National Income Growth Through Higher Labor Productivity

According to Marx, labor productivity grows when the manufacture of a product takes less time or when more products are manufactured in one and the same framework. Increased labor productivity patently lies in that the total labor invested in the merchandise diminishes.¹ A labor productivity increase which in its rate and in its effects makes possible a comprehensive and permanent economic intensification requires a more efficient use of all of Marx' factors of the productive force of labor. That is to say:

—Higher average degrees of skills on the part of the working people through all-round training and education, mainly through efficient mastery over the key technologies;

—Faster elaboration of new scientific-technical data and their faster technological application through a complete interaction between science and manufacture;

—Public combination of the production process through further consolidating the combines and deepening cooperation in agriculture;

—Improving the efficacy of the means of production through profiling the structure of the material-technical base by way of modernization and rationalization using modern data processing techniques, flexible automation, new working procedures and working materials;

—A more sensible use of natural conditions through a better use of the soil and of the natural raw materials and semifabrics and their higher refinement, through closed metabolic cycles and technologies low in waste products in economic and ecological conformity.

Also under the conditions of the scientific-technical revolution—particularly under socialist circumstances—man is and remains the major productive force. The revivifying fire of production is live labor, the degree of effect of which expresses itself in labor productivity. This degree of effect must concentrate today above all on reducing the expenditure of live labor and production consumption, a more efficient use of input leads—especially the capital assets—and more highly efficient investment activity.

Since the 1970's the GDR's economy has been able to ensure a smooth and dynamic growth of labor productivity. Since the mid-1980's, the labor productivity growth alone has been raising our national income. That accomplished more and more a basic requirement for intensive expanded reproduction: Labor productivity grew faster than the national income.

In that period the production consumption was much reduced in important fields. Since 1980, manufacture continued with unchanged and, in part, declining consumption of material. Energy use per production unit declined to 69 percent compared with 1980, raw material and working material consumption, to 74 percent, and the rolled steel consumption of the metallurgical industry declined to 58 percent. That was possible because, on the one hand, waste was eliminated and unjustifiably high material and energy consumption was reduced. On the other hand, new scientific-technical solutions took over. To make such results permanent one must fundamentally increase that portion of reduced expenditures that is accomplished through the use of most up-to-date technologies. Refining is decisive here for further developing economic production structures. Energy and material intensity precisely is what reflects the scientific-technical level of an economy; reducing

production consumption is a basic principle of intensive expanded reproduction and not primarily due to raw material shortages.

One-third of our industrial investments in the GDR goes into strengthening our own energy and raw material base. We include in that also the secondary raw materials, the secondary energy by-products, and the economizing potentials obtained from a high level of our energy and materials economy. This aspect of reducing production consumption and, hence, of our national income growth will become a greater challenge still in the 1990's to science and technology and to the deepening of the international division of labor. Refining domestic and imported raw materials, and all manufacture in fact, is going to determine the basic direction of our industrial development.

Undoubtedly, the rate and economic efficacy of labor productivity growth must be further speeded up to conform to the Leninist thesis of the crucial role of labor productivity in the contest between the two social systems. In consequence, the SED seeks the fundamental prerequisites for it through its economic strategy and its practical policy.

Further Modernization of the Material-Technical Base

Modernization must be enforced fast and widely. Without modern equipment and technology, no highly efficient modern products can in the long run be produced. At its seventh session, the Central Committee pointed out three major aspects: a faster development of microelectronics, automation down to computer-aided production in enterprises and enterprise departments, and refining in the broadest sense of the word.

Microelectronics is crucial for the technological level and, thus, for the rate of productivity boosts, and that is going to be more the case even yet. Its level and broad use determine the development in all economic sectors. The quantitative and qualitative production advance in our economy greatly depends on the efforts and allocations we concentrate in those sectors. The outstanding role, especially, of machine building for making economic use of microelectronics is obvious here.

In implementation of the resolutions of the 11th and, more still, in preparation for the 12th SED Congress, flexible automation in important economic sectors is becoming very significant. Based on the results of flexible production systems already realized in the GDR, through its use significant goals or economic norms for boosting labor productivity and reducing prime costs, specific material investments, and working capital are envisaged.

What matters now is to "go into computer-integrated production in complete enterprise departments and enterprises, in selected sectors, the so-called CIM [International Congress of Mechanical Fabrications]

solutions."² This is something that has already picked up speed in progressive combines. There is the Fritz Heckert Machine Tool Combine and the Werner Lamberz Polygraph Combine which clearly show how the gradual introduction of computer-integrated production connected with modern industrial management solutions will lead to a high increase in labor productivity. Through automating specific production sectors in the VEB [State Enterprise] WEMA [Economic, Ironworks, Machine works and Engineering Union] Works Union, Gera and in the parent enterprise of the Fritz Heckert Combine, labor productivity increases (on the basis of net production) of some 880 and 575 percent were achieved. Such results demonstrate how much of a potential can be tapped through automation projects.

Efficiency improvements always are primary concerns in gradually introducing computer-integrated production. To that end, automation, process related forms of organization, and computer-based industrial management must be connected with each other organically, and the working people must be trained in these processes correctly and at the right time. The computers demand of us more orderliness, accuracy, and discipline to enforce such fundamental industrial management rules as high capacity shift utilization, eliminating downtime, and labor continuity, which today are general economic requirements to make noticeable efficiency advances possible.

The emphasis is placed, not on the number of computers used, but on their concentrated use for performance growth and higher profits, not on more investments and equipment per se, but on their lucrative utilization, their higher potential for a larger, exportable end product. We are not using the more and more integrated enterprise or CIM for show and tell, but we count on its higher efficiency and reliability and the resulting respect it enjoys among customers. All experiences confirm that this way a great productivity and efficiency gain can be made. We also learn, however, that important prerequisites have to be dealt with for it and complicated tasks have to be resolved. Some of them should here be pointed out.

The success of an automation project depends primarily on the strategic developmental concept of the combines and enterprises. When you have no clear ideas of the technological change processes and the concomitant domestic and international demand in your field for any length of time, you cannot institute automation or other rationalization projects with high economic effects. Your projects are apt to become insular solutions, often all too exorbitant for the economy. It must be made certain, rather, that each of these projects is carried out as a step in a long-term total conception.

Setting up flexible automated production is an element of the reconstruction and modernization of existing enterprises. Therefore it is necessary for the user to work out his own concept, based on process analyses and

long-term production strategies, for setting up flexible automated production systems and accurately to formulate his requirements for the manufacturer of automation equipment and automation-friendly materials.

The modernization of the material-technical base was deliberately dealt with here in using the example of automation because that makes most clearly visible the new requirements and problems of the 1990's. Of course we take into account that scientific-technical progress, the technological change processes, goes on in many different forms and that our economic strategy, our efforts on behalf of top productivity and economic efficiency, has to be made to work under very diverse conditions. Along with the rapidly growing economic sectors that have most up-to-date technology, other sectors and enterprises will be compelled for a long time to come, still to work with technical equipment of yesterday. They must not be left behind as far as rationalization and modernization measures are concerned, as given conditions permit.

High efficiency, improving the input/output ratio, and production proper as to demands and sales-oriented today require above all to penetrate more deeply still the economic connections of the intensive expanded reproduction cycle and shorten production and distribution time frames. The idea is to achieve high efficiency as fast as possible and through the lowest possible use of resources. That gives greater importance to logistic labor principles, aiming through a holistic assessment of production processes in a unity of material and data flow at an output through the lowest costs and with the highest yields. One wants still more coordinated efforts between scientific-technical and material-technical production preparation and between the production sectors all the way down to sales, the proper use of production techniques, and a rational organization of production, storage, transport and data processes. Marx already wrote that any blockage in one stage effects more or less of a blockage of the whole cycle,³ that the cyclic continuity depends on the speed, regularity, and safety in allocating the needed mass of raw materials.⁴

How, e.g., through the use of logistical labor principles it was possible to contribute to the intensification and modernization in transportation, is demonstrated by interbranch solutions such as the "Iron Ore Production-Transport Chain" or the first stage of the "Solid Fuels Production-Transport Regimen." Linking production with transport, reducing reverse trends, uniting production and transportation currents, and using modern computer techniques here led to a higher supply procurement efficiency and to a considerable drop in specific material consumption. But also experiences in the combines of Fritz Heckert, Robotron, Polygraph, Textima, and NAGEMA make clear that great reserves to accelerate the material flow can be tapped through organizing a production-oriented manufacture, ensuring proportionality among the production capacities, heightening the

availability of installations, and a production structure proper in its manufacturing and assembly processes.

The Combines' Key Function

Our own and international experiences have shown that the technological change processes of today, and all the more those of tomorrow, call for great and increasing preparatory efforts. The allocations for science, R&D, are growing especially, and faster than in other economic sectors. And it does not mainly come down to the number of scientists and engineers, but principally, to being equipped with scientific devices. Creativity, the tempo, and the efficiency are widely determined by that. Within the last decades, the physical and standard range of such equipment per worker in R&D has been raised by multiples in the most important capitalist countries and corporations. This trend is holding, is increasing in fact. Also the development and broad application of the modern key technologies on the whole make high demands on the investment capacity and efficiency in investment activity. It follows from that that the accumulation capacity and the management and planning of investment activity have become a key question of scientific-technical progress within the economic scope as well as in the combines and their enterprises. They greatly determine the rate of growth in labor productivity.

That leads to two conditions for accelerated labor productivity growth in our country that has more than ever become a priority. One is the strict need to bolster the collaboration and division of labor with the Soviet Union and the other socialist countries in the struggle for a higher rate of scientific-technical progress and for international top performances. And then it is a matter of theoretically and practically answering the question as to how the combines' efficiency can be raised in accordance with the requirements of the 1990's. Here we assume that only properly large and efficient economic units can cope with economic projects, whereas a single enterprise cannot reach the required reproduction capacity. In this sense the combines will remain the main force to cope with the scientific-technical revolution. They already decide on some 90 percent of R&D tasks, 80 percent of the funds, and the activities of approximately 70 percent of all those engaged in science and technology.

Among economists in some socialist countries one can sometimes hear the view expressed that smaller enterprises could become agents of the scientific-technical progress and larger enterprises, occupying a monopoly position in their field, should be dissolved and divided. We of course also assume that the juxtaposition of large, medium-size and small enterprises within the scope of the combines is important for running the reproduction process. At the same time, however, all experience demonstrates that high tech with its above-average demands on the scientific-technical level of the products and on the mental, material and financial preparatory efforts

can be developed and produced only by efficient large economic units. Despite all the importance smaller enterprises may have today and tomorrow, only a combine like Carl Zeiss Jena, e.g., was able through its capacities to develop swiftly the 1-megabit circuit including the technology for fabricating it. Furthermore we see today in the industrially developed capitalist countries as one of the major developmental tendencies that the large corporations merge in various forms to create new technologies to acquire the needed capacities, and that it makes no sense to claim that smaller or medium-size enterprises are dominating or that the market plays a predominant role. The management of large capitalist corporations has no room for such romantic notions.

The most important step to reach their needed efficiency is the combines' systematic conversion to the principle of in-house production of means. The purpose of its use lies in boosting the efficiency of the economic units and, hence, of the entire economy, and in increasing their flexibility to ensure better demand satisfaction at increasing efficiency. Through the in-house production of means it becomes more compelling and more worthwhile for the combine and enterprise collectives to manufacture a larger end product of better grade with higher labor productivity and increasing efficiency and to sell it profitably. The economic situation of the combines and enterprises lets us sense what is good and what is poor economic management. From it new impulses arise for the initiatives of the collectives while economic thinking and action become all the more necessary.

The economic essence of the all-inclusive application of the principle of in-house production of means lies in tapping as a source for intensive expanded reproduction means of accumulation in one's own domain, contributing a maximum to national income growth, and better harmonizing one's own services to society with the funds society makes available.

Every general director "has himself the responsibility to produce the means for the intensive expanded reproduction of the public property entrusted to him by society and to use them for an optimum economic benefit. This is the core of the principle of in-house production of means. Its comprehensive application is a requirement of principle for the further implementation of our party's economic strategy."³ That calls for clear information on net production and net profit and for understanding the substance and effect of export profitability.

The combines get distinct shares of the available net profit and of the amortizations to set up out of them the funds for science and technology, investments, and general repairs. If they produce more, they get the benefit of it, if less, they have less available. For applying this principle in all combines, at least the following premises turn out to be decisive: Properly balanced and ambitious plans at one; more long-range and stable standards;

setting up material and financial reserves to remain flexible if conditions should change; and the preparation of a central economic structural concept for at least 5 years.

Those premises develop of course while the principle of in-house production is taking shape. It will become fully effective when every worker can feel its effects. To us it is the crucial way to enhance the attitude toward socialist property in the means of production by a whole new step.

In introducing this principle, our party assumes that it must come step by step and that all experiences have to be thoroughly studied and analyzed before the next step is taken. The 16 combines where this use was first initiated reached a growth in labor productivity and economic efficiency that exceeds the average of industry at large.

Full and Effective Use of the Labor Capacity

As man is the major productive force, the level and rate of productivity improvements depend mainly on the development and practical utilization of his talents and capabilities. To make sure that this is so is the key issue in economic management activity.

Both from the quantitative and qualitative side of the social labor capacity decisive effects on performance improvements are derived. Our economy faces the task to produce a much larger number of end products while our quantitative labor capacity is stagnating or in retrogression. Real premises were set up for making this possible: we possess a skilled mental potential and a well-tested training and advanced education system.

The economic weight of the educational factor is explained not merely by the annually increasing allocations for education, rising from M 1.13 billion in 1950 to M 13.5 billion in 1988, but mainly by its unique ability to be nearly unlimited in its development and effect—this, however, only if this inexhaustibility is reproduced through a permanent acquisition of most up-to-date knowledge and the full development of science at an increasingly higher scale.

Relying on the foundation of popular education, the combines are greatly accountable for training the social labor capacity through the working people's training and advanced education. The prescient training for the total worker, the exchange, communication and cooperation of the abilities and knowledge of all the members, the college and technical school cadres as well as the specialists and master workers, comes mainly out of advanced education. But the decision on the economic outcome and the social effects of such training and advanced education must wait for the labor process itself. Only when this fund is used with the highest efficiency will the enormous educational allocations, being lead-type investments, crystallize also in a greater end product and

productivity, in the degree of innovation, and in the quality. In the practical application of this realization there obviously continue to be some contradictions, but it mainly is a matter of consistently carrying out everywhere the performance principle as formulated by Marx with its two inseparably connected sides—"from each according to his ability, to each according to his performance." Today it is still out of the question to claim every worker is already used in accordance with his ability and he fully applies his abilities that are already being used maximally.

Our party has taken account of the educational requirements through its prescient educational policy, through a properly timed retraining for engineers and economists, technicians and data processors. Even so, retraining is gaining importance even in those fields. The reason for that mainly is that the explosion of knowledge in science and technology is confronted with the fact that the proportion of university and technical school cadres in industry newly entering the work life will be retrogressive—also caused by our demographic development.

How each cadre is (and becomes) self-motivated—and that also applies to the managers who, after all, are heading the innovator processes—and acquires new knowledge in his field on his own, that becomes more and more important. Waiting for educational opportunities in the final analysis is a waste of time. That is another reason why the greatest importance is attached to the dissemination of rational methods for an independent acquisition and proper absorption of knowledge.

So we have seen that there are many factors that determine the growing rate in increasing labor productivity today. These are conditions that have to be created within the framework of the economy as well as in combines and enterprises. Continuity and renewal are basic requirements for it.

Footnotes

1. Cf. Karl Marx, "Das Kapital," Vol III, "Werke" [Works], Vol 25, Dietz Verlag, East Berlin, 1964, p 271.

2. Comrade Erich Honecker, "Aus dem Bericht des Politbueros an die 7. Tagung des ZK der SED" [From the Politburo Report to the Seventh SED Central Committee Session], Dietz Verlag, East Berlin, 1988, p 37.

3. Cf. Karl Marx, op. cit., Vol II, "Werke," Vol 24, Dietz Verlag, East Berlin, 1963, p 107.

4. Ibid., p 143.

5. Guenter Mittag, "High Achievements by All Combines While We Are Approaching the 12th Party Congress," NEUES DEUTSCHLAND, 9 March 1989, p 5.

Interaction of Technology, Industry Examined

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[Article by Klaus-Dieter Gattnar, first deputy general manager of the VEB Carl Zeiss Combine in Jena: "Productivity—The Common Denominator of Science and Production"]

[Text] Accelerating the scientific-technical progress, racing against time in the development and introduction of new technologies and products, and seeking to cope with them securely and most efficiently is more than a scientific-technical challenge. In this field an essential portion of the contest between the social systems is being conducted and there is being decided, conspicuously, which of the main forces of our age are able not "only" to produce new productive forces, but also to have them become effective for solving the global problems, for the present and future well-being of men. This struggle through high tech is being conducted about it with increasing toughness.

The SED's [Socialist Unity Party of Germany] economic strategy assumes that in this struggle it will be decisive to link more effectively still the advantages of socialism with the scientific-technical revolution. A close, economically highly efficacious cooperation between science and production is a factor of crucial importance to it. The efforts of the VEB [State Enterprise] Carl Zeiss Combine in Jena have shown that properly fashioning that link is a solid basis for top performance that can become effective through production at short shift and thus time and again back our claims as a high-tech center. In fashioning these relations we proceed, in principle, from that it is the people who produce such top performance. They have to be properly motivated and trained; they have to be given the proper prerequisites and conditions for coping with the tasks.

Science-Intensive Production

For scientific apparatus construction—an area that controls the work in our combine—high-tech development and application is of fundamental importance as science devices create the prerequisites and means for new insights in the natural and technical sciences, form the basis for the technical-technological utilization of new science data in production, and are themselves subject to high-tech research and application.

Our optical precision devices construction development is marked by those three functions in R&D and production. That importantly guarantees our renowned position. It can already be demonstrated in the connection between mathematics and natural science research, material development, and the manufacture of optics devices in microscope construction by Ernst Abbe, Otto Schott, and Carl Zeiss, but no less, at the present, by the optical precision devices construction in the VEB Carl

Zeiss Combine in Jena. Its output—in conformity with the 11th SED Congress resolutions—is determined by such high technologies as the manufacture of highly integrated microelectronic circuits, electronics machines, high vacuum techniques, high performance optics, and lasers.¹

Typical of the research trend is that it concentrates on increasingly smaller dimensions on the one hand and on cosmic dimensions, on the other, so that new demands are made on science devices. Our combine takes account of that by its commodities of from "micro to macro": devices of the smallest dimensions are as much part of our production program as are astronomical devices. Such scientific equipment is prerequisite to the technical-technological utilization of new science data in production. It makes possible, in particular, the highly sensitive and accurate recording of geometric magnitudes and of time-determined processes, the measuring of substantive properties, the production of microstructures, the control over more and more complex plants and aggregates—especially of extreme states—the providing for and monitoring of special production conditions, and an extensive use of communications techniques and data processing.

The high demands made on high-tech devices and attachments call for a top scientific-technical status and a top technical-technological level in production. High tech and producing science devices belong together. Spotting trends of the use of high tech for the development and manufacture of science devices as well as for the high technologies for which the devices are used call for a constant redefining and concentration of manpower and funds.

Productivity and the Scientific-Technical Level

The scientific-technical level of a combine's products is determined by the status of its technologies and the mastery of them. Thereby we mean:

- The necessary theoretical knowledge and the practical experiences gained through the applied working principles and procedures;
- The availability of materials, cooperation, and ancillary supplies needed for applying the working principles and procedures;
- The special technical and technological equipment needed for the use of the working principles and procedures (the plants, machinery, gadgets, tools, adjusting controls and testing devices);
- The skills the workers, engineers and scientists have to produce, apply, and improve the working principles and procedures used.

The technical policy and developmental performance in high tech for creating new working principles and procedures determine through medium-term time frames (5-10 years) and even long-term ones (10-15 years) the framework for the production lines, the production allocations, and the product quality. Only on the basis of the available technology and a corresponding technological infrastructure can production lines be changed and upgraded on a short-term basis (2-4 years).

An industrial branch like "optical precision devices construction" can therefore be successful on the long run only if it strategically conceives its scientific-technical performance for future product and process innovations based on the further development and perfecting of the technological base, resolutely comes out with them in parallel to current R&D and transfer missions with adequate potentials, and lets itself be guided in this by the top level to be reached in performance. Slighting the work on the technology of tomorrow inevitably leads to losses in position and cannot normally be made up over the short run.

It is of decisive importance therefore for the success our combine has how this process is undertaken and dynamically being adapted to the changing conditions. Especially one must develop the ability to earmark and push through as fast as possible the requisite concentration of manpower and means to take up entirely new tasks for most highly demanding product and procedure development, so as to adapt the time frames involved to the market requirements.

Proceeding that way, we have reached technical-economic top achievements several times. In the development and pilot production of the most highly integrated storage circuits, e.g., the distance from the leading international level was considerably reduced within only 2 years.

Higher Combine Responsibility

Organizing product and process innovations relying on the perfecting and further development of the technical base goes together with working further on an economic production design and with a gradually heightened combine autonomy relying on the principle of the in-house production of means. The demands of the scientific-technical progress and from the markets compel us fast to eliminate old and unproductive technologies and products and turn to auspicious, salable procedures, and products. That may lead to completely stopping some production and to changes of the proportions among industrial branches in the economy.

The fast development of the production share of microelectronic circuits, electronic machine construction items, and of the high-tech program in the total production volume shows how strongly these changes that are based on the 11th SED Congress resolutions are already practically effective. By 1995 that share will have risen

by multiples compared with 1980, at a simultaneous growth of the total output of the Carl Zeiss Combine in Jena, fourfold.

This production designing goes together with forming a highly developed technical base, a science and investment strategy, a marketable commodity and production conception, and a politically astute, responsible, and technically skilled cadre potential of a high moral quality. The totality of all this forms the premise on which adequate scientific-technical achievements, high economic results and, ultimately, top performances, can grow.

The Science-Production Link

The level and rate of development of high tech and peak performance increase the need to continue such production designing in the scientific research institutions of the Academy of Sciences and the Ministry for University & Technical School Affairs, and to focus on the objectives of industry. That requires setting up R&D potentials working in an interdisciplinary fashion at dimensions that qualitatively and quantitatively surpass previous magnitudes. That is necessary for rapid research and for making that research available to industry that also can fast be applied. So, together with a research lead, we also have to organize the needed educational lead.

While further perfecting the in-house production of means in the combines, the need for keeping account of all resources, especially the funds, becomes more compelling. Relative to the research on commission this means that, actually, for lead research and other R&D projects money may only be spent if they are relatively certain to yield a good profit in the foreseeable future. Making that process prevail requires a sharp caesura in the thoughts and actions of those working in commissioned research as well as a production design for the R&D capacities in the research facilities of the Academy of Sciences and in university affairs. With the funds becoming scarce, such design becomes more and more necessary. For the combines, with their autonomy in particular strengthening the conceptual-strategic projects to determine the scientific-technical lead becomes indispensable, mainly to expand and improve the technical base. Establishing medium and long-term main lines for the research lead in the combines also implies of course tasks with a calculable innovation risk, it to be taken into account that, exactly, a high risk successfully dealt with normally also produces high economic results.

Of the central state organs the higher combine autonomy demands for the upgrading process of production that they will strongly orient their efforts toward in substance and strategy preparing and enforcing the economically needed structural policy while exhibiting technological infrastructures and synergies. That is necessary for creating essential preconditions, through manpower and

fund concentration and bringing together R&D potentials in industry, the Academy of Sciences, and the Ministry for University & Technical School Affairs, for that high tech and key technologies and interbranch basic innovations can be pushed forward.

Technical Centers

The concentration of manpower and means caused by high-tech research and the economic compulsion to gain and expand market positions demands of the combines and their scientific cooperation partners to organize efficient forms of cooperation.² A growing place value accrues in this to the technical centers—as the spots where science and production interface.³

For further structuring the science research institutions and the research priorities we assume that the medium and long-range tasks in industry for upgrading and improving the technical base require special development and deepening of particular techniques and technologies. The priorities for it are set by the objectives for the economic structural policy, e.g., through further expanding the microelectronics technologies with the transition to a new technological level. For that it is absolutely necessary that selected areas in basic research are of the highest level so that, based on it, the applied research under industrial commission can be pushed into technical and economic top performance, which in turn will allow us to gain adequate world market portions by means of further production structuring.

Through raising the combines' autonomy one thus orients in a complex manner the chain of basic research-applied R&D production to economic targets. To that end one has to enforce for this selected sector conditions for enough of a time frame suitable for intensively connecting with each other, on a high research technology level, basic and applied research all the way to the development of new products and technologies. In accordance with experiences so far, the proportion of basic research financed from central funds in these centers should make up from 15 to 30 percent of the total research capacity. From 70 to 85 percent should be oriented to the implementation of research priorities through the commissioned research of the combines and be carried out as individual tasks or embedded in complex projects.

Science research institutions should take into account that the growing combine autonomy also makes it increasingly necessary for the upgrading process to involve leading scientists in the strategic efforts. Not a relatively casual determination of trends and concepts for solutions for any given scientific area is expected of them, but a sound scientific coshaping of strategic combine conceptions with regard to the market flux and to the limited resources in manpower and means—and the preparation of technical-economic innovation conceptions up to including serious proposals on structure design. Hence the scientists are confronted with the

challenge responsibly to help shoulder such decisions. This puts virgin territory under the plow.

In the cooperation with science institutions often the complaint is heard that new product and procedural ideas that are there are not efficiently transferred into the production process. That is particularly true for entirely new solutions. Yet that there is a solution for a scientific-technical problem is by itself not enough for innovations—the motors for the productive forces development. An innovation only becomes an innovation when it connects with a demand that exists or is latent at least. That, however, means applying research results prior to deciding their going into production, optimizing them with regard to application tests, making them technologically reproducible—in ultimately assessing them economically.

Many of the requirements dealt with here are effectively supported by the technical centers set up.⁴ A technical center is a combined modern research laboratory, application, measuring and testing center, scientifically conducted workshop and training and advanced training center tied to a scientific research or training institution. They may also be set up in enterprises and combines. Their tasks are to:

- Test novel effective and working principles of technologies and products in practice;
- Verify research results, test them at the user, optimize users' results and provide a satisfactory technology ripeness;
- Organize small-series production for market preparation or make small-tonnage, highly refined special working materials and chemicals;
- Organize interdisciplinary research projects to enhance the ripening process and speed of transfer into the production process;
- Deepen the unity of instruction, research, and practice and ensure a higher level of practice-oriented training and specialized advanced training for industrial cadres.

The work in the technical centers and on the research projects should be so stimulated with the priority tasks that collectives and managers both are equally interested in an above-average high developmental rate and high-grade products and develop the requisite performance readiness for it. One must absolutely draw general rules from the experiences garnered with the megabit-storage project; the basis on which such achievements evolve should in a target-directed manner be expanded in industry and science. No one can perform nothing but top achievements in brief periods, yet it is important to counter the danger of mediocrity in good time and

efficiently. In this sense the workers, scientists, engineers, and employees in all enterprises and sectors seek to turn the combine into a high-tech center.

Footnotes

1. Cf. Klaus-Dieter Gattnar, "High-Tech and Science Devices Construction," JENAER RUNDSCHAU, No 2, 1988, pp 56-57.
2. Cf. Klaus-Dieter Gattnar, "Top Achievements Want To Be Organized," EINHEIT, No 4, 1988, pp 320 ff.
3. Cf. Harry Groschupf, "Technical Centers of Science and Production Cooperation," EINHEIT, No 1, 1986, pp 35 ff.
4. Cf. Eberhard Brink/Gerhard Schilling/Manfred Voigt, "A New Step in the Organic Link Between Science and Production," WIRTSCHAFTSWISSENSCHAFT, No 1, 1989, pp 13-14.

HUNGARY

Press Conference Highlights New Labor Measures

25000188a Budapest NEPSZAVA in Hungarian
31 Mar 89 pp 1, 4

[Article by A.S.B.: "Let the Enterprises Decide About Introducing a 40-Hour Workweek"]

[Text] Dr Laszlo Bukta, a deputy chairman of the State Office for Wages and Labor (ABMH), welcomed journalists to the national press conference his office held yesterday morning. The public's generally heightened appreciation of wage and labor affairs lent special timeliness to the press conference. Naturally, senior ABMH officials also seized this opportunity to report on the latest measures.

It was especially emphasized at the press conference that employment-related services now play a more prominent role within society. In the labor market—within society, in other words—we now encounter durable new phenomena requiring decrees, measures, and propaganda substantially more effective than in the past.

The domestic labor market's durable phenomena include its localization. Job-creating investments in any area are of immense importance because residential mobility is minimal, and the local manpower seeking jobs must find employment locally. The Hungarian economy's restructuring also requires changes in the occupational structure, giving a particularly important role to the various occupational retraining courses and their organizers.

Speaking about the new wage- and labor-related measures, Laszlo Bukta said that henceforth, according to a decree that would be promulgated soon, the period of

full-time study at a higher educational institution would count as employment for the purpose of determining a person's length of service. It will probably be news to many people that the ABMH does not intend to restrict or regulate the introduction of a 40- or 42-hour work-week, and will let the enterprises—the prospering ones, of course—decide this question for themselves. As of 1 April, there will be new regulations in effect on business loans for persons starting or resuming their business careers.

The ABMH deputy chairman announced that an international employment agency would be formed soon. Its task will be to find job opportunities in foreign countries, and to place applicants in such jobs. It was also announced that, on the basis of contacts established with the GDR, several thousand Hungarian workers would be able to work there as of 1990. The traineeship system to be introduced as of the first of June was also mentioned. Its intent is to provide centrally financed traineeships for those university or college graduates who have not been able to find employment, and also to extend in this manner the length of time during which they can seek jobs and apply for announced vacancies.

Laszlo Bukta discussed in detail the nearly \$3 million loan that the World Bank has provided "to contribute toward the social costs of restructuring." It will be used to streamline employment policy and upgrade employment-related services, for manpower planning and forecasting, to alleviate any crisis caused by possible mass layoffs, and to set up a center for occupational retraining.

Pursuant to a resolution of the Council of Ministers, senior officials of the ABMH have elaborated the principles of civilian service. The most important of these principles states that persons performing civilian service must be assigned work that provides suitable opportunity for their personalities to unfold and for the realization of their humanitarian principles. Such work exists primarily in the fields of welfare policy and health care. In any event, it will be necessary to ensure that the work assigned to persons performing civilian service is clearly beneficial to society.

The deputy chairman and senior officials of the AMBH answered the questions raised by the NEPSZAVA reporter. Regarding the termination of the state's monopoly to operate employment agencies, we learned that the maintenance of this monopoly was deemed necessary in some areas, but other organizations (namely associations, federations, and trade unions) were also able to operate employment agencies at present. The further broadening of this activity was primarily a result of the government's decision. In response to our question regarding the extent to which the government intended to include trade unions in the safeguarding and reconciliation of interests, we were told that the methods of trade union participation would have to be worked out in a jointly elaborated program. In practice, however, cooperation with the trade unions has already

begun. After all, the trade union training centers, not all of which are suitably utilized, can serve as excellent bases for occupational retraining and further training. Cooperation with the trade unions in Borsod County was cited as an example. There the training center of the county's trade union council will be converted into a model center for occupational retraining, which will be financed from the loan the World Bank is providing.

Our final question was whether the government intended to restrict the acceptance of jobs abroad, in view of the fact that it is the best skilled workers in the most demanded crafts who were planning to work abroad. The answer was that the best skilled workers were the most appreciated and sought after in the world labor market as well, and this also meant the recognition of the craftsmanship and knowledge of Hungary's skilled workers and experts. Therefore the government did not intend to restrict the acceptance of jobs abroad, and it was confident that Hungary had sufficient vocational reserves to cover any dropout of skills and professional knowledge.

At the end of the press conference it was announced that a national conference, with international participation, would be held between 10 and 12 April, on unemployment, its probable effects, and ways of handling it.

SZOT Secretary on Groundwork for Trade Union Federation

*25000188b Budapest NEPSZAVA in Hungarian
31 Mar 89 p 3*

[Interview with Mrs Kosa nee Magda Kovacs, secretary of the National Trade Union Council, and Bela Romanyi, secretary of the TV Workers Trade Union, by Gyorgy Voksan: "Versions of the Majority's Will"; date and place not given; first paragraph is NEPSZAVA introduction]

[Text] In December, the National Conference of Hungarian Trade Unions decided that a voluntary trade union committee should draft the future charter of the independent trade union movement, which was about to become a trade union federation. A 25-member committee was formed of delegates from the horizontal and vertical unions, and from the commissions for the various strata within the SZOT [National Trade Union Council]. The committee began its work on 12 January and completed a draft of the charter by early March. The SZOT Presidium discussed this draft at its latest session, attached its own additions and comments, and rewrote the whole draft as a version it considered suitable for debate. SZOT members will be discussing the two versions at their meeting today. In what respect has the unofficial committee aided the Presidium's work? This was the first question we asked Mrs Kosa nee Magda Kovacs, the SZOT secretary, in our interview. Bela Romanyi, secretary of the TV Workers' Trade Union and a member of the mentioned voluntary trade union committee, was also present at the interview.

[Mrs Kosa nee Magda Kovacs] I consider the committee's work important because it has brought to the surface and has confronted in the preparatory stage the conflicts of interest that could be expected to arise only after the future federation's formation. We have to face the fact that if this federation is indeed formed, and from below moreover, there may be a clash of interests on some questions between the organizations forming it. The interests of an internally less-segmented, large organization that continues to function as a vertical union—and there are several such organizations among the federation's potential members—are different from the interests of a federation consisting of independent organizations, or from those of a homogeneous organization with few members.

[NEPSZAVA] Did the small organizations have a say in drafting the charter?

Mrs Kosa nee Magda Kovacs: Our experience is favorable in that the majority has not attempted to vote down the minority. Instead, the differences of opinion have been formulated, and the contrasting alternatives placed on record. In such cases it is then the task of the SZOT Presidium to consider the different versions and to choose one of them for further consideration. The material could not be presented to the plenum if it contained versions at complete variance with one another.

Bela Romanyi: The Presidium, we believe, has crossed out from among our proposals a few more alternatives than was necessary. Especially because, in the final outcome, each of the alternatives considered by the committee were included in the discussions through the majority's will. Thus the majority, whose interests might have differed occasionally, accepted in each case the minority's proposals and alternatives.

[NEPSZAVA] How did the committee compile its material?

Bela Romanyi: Together with a few members of the committee we reviewed, among other things, the bylaws of the Austrian Trade Union Federation, the rules of organization and procedure of the Swiss Trade Union Federation, the bylaws of the [West] German Trade Union Federation (DGB), and the bylaws the SZOT had adopted on 2 December 1945.

[NEPSZAVA] In what way do the two versions differ?

Mrs Kosa nee Magda Kovacs: The most significant difference is that the SZOT Presidium has left out from its version several modifications; mainly where it felt that only one of the versions could be used, and the other would be unsuitable for submission to public debate. At the same time we deemed it important that SZOT members become acquainted also with the original version, and that is why they are being presented both versions.

[NEPSZAVA] It is still not quite clear to me what criteria were used by the voluntary committee and the SZOT Presidium respectively to judge this or that alternative unacceptable.

Mrs Kosa nee Magda Kovacs: That is not so complicated. Consider, for instance, the question of who are to be the federation's members. The Presidium has strived not to exclude from membership any organizational unit that would have any possible interest in joining the federation. The draft adheres to this principle in all its alternatives. In other words, we have strived to avoid any "pocket" within the 4.3 million strong labor movement that the charter would have kept out. In my opinion, the prepared compromise version is able to accommodate everyone.

Bela Romanyi: We have been aiming for an expedient charter that could serve as an effective tool and platform for the assertion of interests divided by a million conflicts. We have drafted a skeleton document which we could call, mathematically speaking, the lowest common denominator.

[NEPSZAVA] Can we say that in Hungary there is not a single minuscule corporative organization whose interests are antagonistically in conflict with those of the majority?

Mrs Kosa nee Magda Kovacs: That is a good question. To me, on the basis of the debates that accompanied the drafting of the charter, there does not seem to be any. And we believe that this is true. The organizations which are not members of the SZOT at present cannot use any passage of the draft as a pretext for not joining. You will recall that the present independents used the bylaws then in force to quit the SZOT, and they were entitled to do so. Because the bylaws suspended in early March declared that ours was a movement based on the principle of democratic centralism, organized from above and developing according to predetermined rules.

[NEPSZAVA] That partially answers my next question: Why is it necessary to summarize the rules of organization and procedure in a new charter?

Mrs Kosa nee Magda Kovacs: But that is only a part of the answer. The rest of it is that the old bylaws actually reflected the earlier state of the movement. Since the National Conference in December, therefore, the trade unions have continually transcended the old bylaws' provisions regarding the SZOT's structure, organization, and procedure—in other words, the provisions that the 6 March plenum of the SZOT has rescinded.

Bela Romanyi: The old bylaws were truly the rules of organization and procedure of a typically monolithic and stereotyped organization organized from above, one that also "found" its individual members. It dictated uniformity, which today is already intolerable. The National Conference in December recognized this and sanctioned

the need for qualitative change, by approving the principle of building the federation from below.

[NEPSZAVA] Until the congress in February, then, the Hungarian trade union movement is functioning without bylaws?

Mrs Kosa nee Magda Kovacs: As I have mentioned earlier, the plenum has rescinded the provisions of the bylaws regarding structure, organization, and procedure. This has left the SZOT plenum, as earlier constituted, as the body with authority to make decisions until the congress that will be held next year. Decisions, of course, may be made also this year, with the inclusion of new collective formations, once most of the vertical unions have held their congresses.

[NEPSZAVA] The draft charter regulates also the financial conditions of membership. In this respect, has a common denominator been found for future members?

Mrs Kosa nee Magda Kovacs: The sharing of membership dues is truly the draft's trigger point. Dues in many countries—and here I could list a series of Western countries—serve merely to support the organization. In Hungary, however, the dysfunctions in the implementation of the government's welfare and employment policies have shifted onto the trade unions a host of tasks that do not belong in the labor movement's original scope and should not be financed from membership dues. But the cannery worker in Nagykoros is obviously not interested in who solves his problems in making both ends meet, whether it's the state, or the trade unions from the dues they collect from members. The worker asks for assistance when he is unable to pay his electricity bill. And to whom but the trade union committee can he apply for assistance? This is why the trade union locals are demanding an ever-larger share of the membership dues. They fail to take into account that some organizations will be unable to afford the costs of supporting the organizational structure above them—in this case, the federation—and will therefore exclude themselves from the national labor movement.

[NEPSZAVA] The draft reads: "Let the majority view assert itself in the decisions adopted in the course of the federation's activity. But the minority's will must also be represented and expressed." How long will this satisfy the minority? In other words, what guarantees that the consensus essential to the federation's activity can be maintained?

Mrs Kosa nee Magda Kovacs: In conjunction with this question it will be necessary to broadly clarify just what it means that, as a rule, decisions are based on a consensus; or that solidarity becomes the decisionmaking principle. In the final outcome, the majority decision stands but is relegated to the background. For the charter does not regulate all this in detail, and the views regarding it differ considerably. Many people interpret consensus to mean that the persons with authority to make

decisions agree on the same standpoint. Thus compromise is the essence of a decision, which all the participants then regard as binding upon themselves.

Bela Romanyi: Practice has compelled also another interpretation of consensus, one that provides a way to respect the standpoint of the minority that is not a party to the compromise. In other words, the decision does not apply to the minority, and the latter is not obliged to implement the decision. This is important especially in cases when some organizations justifiably argue that they are the ones to determine how their money is to be spent. Reverting to your question, the circles of the majority and minority respectively are changing constantly, depending on what questions are being debated; and this, in my opinion, is one of the guaranties that a federation based on consensus will be widely maintained. Incidentally, it is specifically the majority decision in the traditional sense that threatens the federation's unity; if such a decision is binding on those whose interests are the exact opposite, they might well distance themselves from it.

[NEPSZAVA] Perhaps the federation's conciliation board mentioned in the draft will be the body to continually achieve agreement between the majority and the minority?

Bela Romanyi: We are proposing the formation of such a board primarily because between member organizations, or between a member organization and the federation's organs, there may exist minor conflicts or differences of opinion, with which it would be a waste of time to burden the national plenum. In such cases a "judicial body" could be useful to effect a reconciliation between the parties in cases involving minor problems.

Mrs Kosa nee Magda Kovacs: In the initial period this board will probably play a role in deciding questions regarding the relationship between the federation's charter and the member organizations' bylaws. For, according to the logic of developing the federation from below, first the member organizations must be formed and must adopt their bylaws; and finally the federation must be formed and its charter adopted. There cannot be any contradiction between the two types of document. It will be up to the conciliation board to examine the documents in detail and perhaps propose possible changes.

[NEPSZAVA] There are also other new provisions in the draft. For example, both the federation's secretary general and its chairman are to have a deputy.

Mrs Kosa nee Magda Kovacs: This ties in with the fact that in future the national federation will have not only elected officials, but quite a few appointed ones as well. The number of elected officials will probably decline, and only they will be ex officio members of the council and presidium respectively. According to the proposal, the SZOT secretaries will be appointed officials of the SZOT apparatus, and not Presidium members. At the

head of the professional apparatus, this will enable the SZOT secretaries to represent different political directions within the SZOT leadership. Here I have in mind primarily the political parties that are trying their wings.

[NEPSZAVA] The federation, according to the text, is independent of political parties, but relies in its activity on the best domestic and international traditions and experience of the leftist movements, parties, and trade unions. Does this "respect" for tradition not jeopardize the federation's independence?

Mrs Kosa nee Magda Kovacs: It is expedient to incorporate in the federation's work style not just the trade union movement's own traditions. The point is that the labor movement appeared for decades in the form of trade unions, and its content was indisputably social democratic. If we want to be fair, then we must incorporate in our work—and here we actually are talking only about the style of work and the way of thinking—also the traditions of social democracy, in addition to those of the trade unions. Through respect for traditions, in other words, we clearly and repeatedly wanted to emphasize openness.

[NEPSZAVA] Do you expect any serious debate at the SZOT meeting?

Bela Romanyi: We do not regard the draft as the final version by any means. If the SZOT approves the draft, it will still have to undergo nearly 10 months of public debate.

Mrs Kosa nee Magda Kovacs: I am confident that the draft, intended to be a skeleton document to begin with, reflects in a balanced manner both the differences and the community of interests that have begun to bud with the federation's organization, and therefore the SZOT's member organizations will regard the draft as a suitable basis of discussion.

POLAND

EEC Agricultural Sales to, Investment in Poland Discussed

26000457 Warsaw POLITYKA EKSPORT IMPORT
(Supplement) in Polish No 6, 18 Mar 89 p 18

[Interview with Noel Devish, adviser to agricultural commissioner of European Common Market, by Andrzej Mozolowski: "We Are Not Building a Fortress"; date and place not given]

[Text] [POLITYKA] Just recently the European economy was faced with two frightening mountains—the meat and butter that had accumulated in EEC refrigerators. Now the latter, which resulted from the overproduction of milk in Western Europe, has melted away. How was this achieved?

[Devish] We used a dual approach. First, we limited the milk supply. Over 2 years, we dropped milk production by 9.5 percent.

[POLITYKA] Were the dairy farmers amenable to this?

[Devish] They had no choice. Every dairy farmer in all EEC countries is assigned a production volume. If he exceeds this volume, the surplus is taxed at a rate equal to the selling price. In other words, the dairy farmers give it away. Secondly, we decided to sell the million-ton mountain of surplus butter to countries that do not traditionally import butter. In this way, we have not destroyed our own outlets. We sold the Soviet Union 600,000 tons at a price somewhat under 10 percent of the value, calculated at the purchase price. We sold 300,000 tons equally cheaply as fodder. (For this purpose, we designated the oldest butter, which had been warehoused for more than 2 years). The remaining 100,000 tons was processed into cooking oil, of which we had no difficulty disposing. There you have the whole million tons.

[POLITYKA] But limiting milk procurement must have led to the slaughter of a part of the dairy farmer's herd, thereby causing the mountain of meat to grow...

[Devish] Undubitably. The number of head of cattle in EEC countries fell from 25 million to 20 million, with the resulting increase in the meat supply—over the short term. Over the long term, fewer head of cattle means fewer calves and, when the calves mature, less beef. For the present, in mid-December, we will advise a cutback on the interventionist procurement of slaughter cattle. We are trying to sell the hefty accumulation of surplus to East European countries, perhaps including Poland.

[POLITYKA] I hope that it will be as cheap as the butter you sold to the Soviet Union.

[Devish] Well, while it certainly will not be that cheap—10 percent of the value—I can assure you that it will be a good deal for the buyers.

[POLITYKA] Soon Polish buyers will embark upon global negotiations on the terms of trade agreements with the agricultural hierarchy of the EEC. To date we have not had good luck with them; EEC protective barriers have thrust us out of our traditional markets. (I give the example of Poland's export of bacon to Great Britain). At the same time, we are perhaps the only socialist country to maintain the regular, large-scale import of farm products from EEC countries. Do you not think that authorizes us to expect certain accommodations in our export of food? Why did the butter you spoke of go at one-tenth the price to the Soviet Union and not to Poland?

[Devish] That was a GATT decision. This organization permitted this sale at such low prices only to three countries: the Soviet Union, Pakistan and India, with the stipulation that their minimum purchase be 100,000 tons of butter. Only the USSR met this condition, and

only it purchased the butter. On the other hand, let me add that the sale of our beef, of which we spoke earlier, will not be subject to any such restrictions. I do not doubt that Poland will be one of its importers.

[POLITYKA] A law is coming into effect in Poland establishing very favorable, competitive terms for foreign capital. Do you see the potential for the broader entry of the capital of EEC countries into the sphere of farm production?

[Devish] Yes, of course, in the form of joint ventures, although not in food production per se, but rather in the export of our modern processing technology, in the field of modern packaging for consumer products, with the field of seed production perhaps the major one. Here in the EEC countries, progress has been made in recent years; genetic engineering is yielding excellent results in increasing yields.

[POLITYKA] I had an opportunity to visit the plants and laboratories of perhaps Europe's chief firm, the Dutch Bejo Zaden. It is familiar to Poles, and has its own stores here. Truly, transferring Dutch achievements onto Polish soil would be a tremendous help to Polish agriculture. But now I would like to ask you a futurological question. As you know, by 1992 the full economic integration of the EEC countries will take place. If this is successful, it will be one organism. The Americans are even speaking of the "European fortress." Nor are other countries outside the EEC without fear. What sort of cannons will be needed to overcome this fortress?

[Devish] No cannons, for there will be no fortress. On the contrary, I believe that our trading gates will open more broadly for you than they did in the past. Do not forget that the CEMA community represents for us 330 million consumers of our products. This represents a tremendous market for us, and our greatest market of the future! And if we wish to export, we must permit equivalent import. Likewise, please take into account that despite the use of instruments stabilizing EEC farm production, generally speaking it will have a trend towards further growth, more rapid than the growth of domestic consumption. These stabilizers cannot be utilized without restrictions. Thus, we must expect the creation of surpluses in the future, both for processed milk products and for grain, beef and veal. This will incline us to open up even more, in the first place onto Eastern Europe.

[POLITYKA] While these are certainly convincing arguments, they are also very general. What specific accommodations will you make, how wide will the gates be opened, and the bridges lowered?

[Devish] You keep going back to those fortresses, while I prefer a more peaceable comparison, for example, from the sports arena. Currently, your exports must surmount other protective barriers in each of the 12 countries—it is a race over hurdles. By 1992, the same game rules will apply in all EEC countries. Exporters will have to surmount only one

obstacle, and the jumping bar will certainly not be higher than it is today. But there is yet another matter. In speaking of integration in the future perspective, I have in mind all of Europe, Europe located between the United States and Asia, Europe that must be integrated. There is no other way. Of course, this takes a long time. The EEC countries already have begun economic integration, and this is an irreversible process. We will still have to solve the very complex problems of unifying the tax system, social welfare and common currency. I believe that by the year 2000 we will have political unity. By this I mean that EEC foreign policy will be one joint policy while each state will maintain a separate parliament and government to manage its domestic affairs.

[POLITYKA] In this light, what potential do you see for the economic integration of all of Europe, including the EEC and CEMA countries, despite the political and systemic differences that divide them?

[Devish] Contacts between the EEC and CEMA countries must be intensified. In many fields, there are common interests that aim in the same direction. That is why we are pleased that CEMA has officially recognized the EEC as a real echelon. As you know, the ultimate mission of the EEC is highly political—the creation of the European Union. In order to attain this goal, many, many actions must be initiated, both in the economic field and in the legal and political fields. Of course, this is an ambitious plan that is also revealing the serious differences that exist with regard to the CEMA countries, particularly on the plane of democratization. This being the case, the goal of uniting all of Western and Eastern Europe must be looked at as a long-term goal demanding that many preliminary conditions be fulfilled.

The EEC is aware of the many responsibilities it has for shaping trade in Europe. While this applies to Western Europe, the importance of trade between the West and East is growing. This also applies to agriculture, in which Poland's interest is very great compared to other countries. Thus, it remains to be seen whether and to what degree, during the negotiations of the agreement between Poland and the EEC, the parties will be able to intensify trade. Several factors come into play here, but I can assure you that the EEC is determined to contribute to improving relations with Eastern Europe, for the mutual interest of both sides.

ROMANIA

Use of Nonconventional Energy Resources Urged
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[Excerpts from a series of articles: "Promotion of Non-conventional Energy Sources"]

Research and Development

[Excerpts from article by Mihail Florescu, minister secretary of state on the National Committee for Science and Technology: "Greater Contribution to Provision of Necessary Energy"]

[Excerpts] The instructions contained in recent party and state documents concerning wider use of nonconventional energy sources are designed to speed up an initiative begun at the 12th Congress, when the master plan for the area of power engineering listed nuclear power and nonconventional sources for the first time in the energy budget of Romania. These initiatives were confirmed again at the 13th Congress and the 1987 RCP [Romanian Communist Party] National Conference. The appearance of two new energy sources, nuclear power and new or nonconventional energy sources, involve preparation of Romania for what is termed in specialized language "energy transition," that is, transition to a new base of primary resources for the production of thermal and electric energy.

This transition is taking place all over the world, from conventional power engineering based on hydrocarbons and coal (which are themselves exhaustible) to nuclear power and then to power based on inexhaustible resources such as solar and wind energy and on regenerable sources such as geothermal waters, biogas, biomass, etc. For a component to win a place in the primary energy budget of the country, nonconventional energy sources have been the subject of an extensive program of scientific research initiated and approved by the higher party and state leadership in 1974 and carried out within a network which currently includes dozens of laboratories at specialized institutes or ones recently created. These laboratories are coordinated by several key units, which have also been declared to be methodological centers.

The following have been accomplished within this research structure, which is outfitted with suitable personnel and material resources: (I) evaluation of the particular energy aspects of nonconventional energy sources; (II) classification of the territory of Romania by climate zones and inventory of the potential for development of resources represented by sun, wind, biogas, geothermal sources, biomass, and micropower plants; (III) research on, official approval, and start-up of manufacture of the first generation of equipment and the more than 200 technologies for utilization of nonconventional energy sources which from the viewpoint of concept are comparable to the best similar foreign products; (IV) development and approval of 79 standard projects for all industrial-scale applications on which research has already been conducted.

I. Nonconventional energy sources exhibit a number of particular features which must be taken into account when they are used. Hence emphasis must be placed on certain major advantages, such as the fact that they are entirely nonpolluting, and even contribute to reduction of pollution (in the case of biogas and biomass). They may be used both in decentralized energy systems (for isolated consumers) and in conjunction with the national electric power and heating system. They are very simple in design and can be operated by the current consumer.

They are virtually inexhaustible (solar energy, wind, the energy of small streams) or regenerable (geothermal energy, biomass).

Among the limits on nonconventional energy sources mention should be made of the random, daily and seasonal, nature of solar energy, with the result that the most dependable use is for seasonal use in the area of generation of heat (which can be stored over the short term) and in that of wind energy, which from the viewpoint of conversion to mechanical energy may be stored in the form of water accumulated in reservoirs, and from the viewpoint of electric energy may also be stored either in batteries, for equipment drawing low power, or directly in the power grid for aeroelectric power plants. In any event, the inexhaustibility and the magnitude of the resources justify the effort at implementation starting with the first generation of equipment, as well as continuation of research to find new solutions which are increasingly efficient from the technical and economic viewpoint.

The Sun, with its derivatives wind, biomass, waves, and streams, represents the most important resource, transmitting a considerable amount of energy to Earth each year, around 450,000 billion tons of conventional fuel. Of this amount, about 180,000 billion tons of conventional fuel are reflected in the upper layers of the atmosphere and at the cloud level, 140,000 billion tons at ground level, 75,000 billion tons of conventional fuel are absorbed by the atmosphere (of which around 20,000 billion tons generate wind), 80,000 billion tons cause evaporation of water, and 75,000 billion tons of conventional fuel represent the solar energy striking the Earth's surface (including photosynthesis processes), that is, 3 times the amount of human consumption of energy in 2000.

The solar energy striking the earth's surface recurs in the form of luminous energy, which can be converted to thermal energy, electric energy, or chemical energy (in a biomass). Thus, from 1 square meter of surface at ground level, around the 45th parallel which runs through Romania, it is possible each year to capture 500,000 to 700,000 kilocalories. This amount represents approximately 75-100 kg of conventional fuel, the equivalent of 75-100 kg of high quality coal, 200-250 kg of lignite, 50-80 meters of natural gas, or 45-70 kg of gasoline. In the event of conversion to electric energy, 80-150 kilowatt-hours per square meter per year can be captured from the annual average energy available on the surface of the ground, 800-1,500 kilowatt-hours per square meter per year. The efficiency of conversion of solar energy in plants (biomass) is very low, around 0.1 percent, but because of the annual cycles of renewal (which represent a form of storage) and the creation of rapidly growing species, increased efficiency is also expected in this area.

II. In Romania, the potential energy that can be drawn from nonconventional energy sources is estimated to be

around 15 million tons of conventional fuel, distributed as follows. [passage omitted]

Solar energy is distributed over 5 sunlight zones: the coastal zone, climate zone 0 with more than 2,250 hours of sunlight per year; zone I with 2,250-2,100 hours per year; zone II with 1,900-1,800 hours per year; zone III with 1,900-1,800 per year; and zone IV with fewer than 1,000 hours per year. On the basis of technical and economic calculations, measurements and research conducted, and data in the specialized technical literature, solar power systems are efficient in areas with more than 1,800 hours of sunlight per year. The solar energy potential that can be tapped by current techniques from an area of around 25,000 hectares. Although this area could be doubled together with the attached farms, in any event it does not work to the detriment of the available farmland of the country.

In the case of wind energy, unlike solar energy, which varies little within a zone, division into major zones is approximate in nature. The wind energy potential may vary within one zone as a function of location conditions (altitude, form of topography, the presence or absence of natural and artificial obstacles shielding wind turbines, etc.). The following zones have been distinguished on the basis of calculations: zone I, comprising predominantly the mountain area and a part of the Danube Delta with the Black Sea Coast, with an average number of 5,000 hours per year, with speeds exceeding 4 meters per second; zone II comprises the Dobruja Plateau, the Covurlui Plain, the Tutovei Hills, and the Suceava Plateau, with an average number of 4,000 hours per year; zone III comprises the Moldavian Plateau, part of the Baragan Plain, the Western Plain along the corridor from Moldova Noua to the Iron Gates, with an average number of 3,000 hours per year; zone IV comprises part of the Wallachian Plain, the Western Plain, Tara Birsei, and the Tirgu Secuiesc Depression, with an average number of 2,500 hours per year; zone V comprises the intramontane depressions and has an average number of 1,500 hours per year. Past experience indicates that it is efficient to use wind energy in the first three zones. Only the installation of low-power turbines is recommended for zone IV, while installation of wind turbines is not recommended at all for zone V.

Biogas is obtained from anaerobic fermentation of animal waste and the waste water containing organic matter of the food industry and from urban waste water. Biogas is a fuel gas with a high content of methane and a caloric contribution of around 5,500 kilocalories per cubic Newtonmeter in comparison to the 8,000 kilocalories per cubic Newtonmeter of methane gas. With existing technologies 1-1.5 cubic meters of biogas are obtained per cubic meter of enzyme.

Geothermal energy has an energy potential differentiated on the basis of wells and geographic zones. Geological research has revealed the presence underground in Romania, at depths ranging from 1,000-3,000 meters, of

hot water filling the pores of granular rock (sands, gravels) or fissured rocks (limestone, gritstone, conglomerates). Generally speaking, the geothermal water in Romania is at low to medium temperatures (from 45 degrees centigrade to 105 degrees centigrade), with an output of a few liters to several dozen liters per second per well. Within the 8 hydrogeothermal systems that have been identified, 65 wells are in production, of which 42 are worked by free eruption and the others by pumping. The lifetime of a geothermal water well is a minimum of 20 years.

III. The technologies and equipment which have thus far received official approval permit the generation of heat over the temperature range up to 100 degrees centigrade with solar and geothermal energy and over the 250-300 degrees centigrade range with biogas and biomass. A characteristic of these energy groups, which produce heat in the form of hot water or air, is that they are simple and more cost-effective in the case of decentralized operation, that is, for small and medium-sized consumers, ones situated especially in rural areas, livestock raising units, and isolated consumers. As regards the generation of electricity from these sources, it is currently based on small hydroelectric plants, wind turbines, and solar panels, which provide directly for conversion of solar energy to electric energy.

As viewed from the consumer's viewpoint, energy, and thermal energy in particular, is not a uniform product and may be regarded as being divided into "energy categories": low-temperature heat (below 100 degrees centigrade), required chiefly for heating residential, public, and sociocultural buildings and for obtaining sanitation and household water and for certain specific technological products, such as drying grain crops, vegetables, and fruits, washing glass containers in food industry factories, wind, etc.; intermediate-temperature heat (100-250 degrees centigrade) needed for processing in the food, textile, and construction materials industries, especially for wood and bricks; high-temperature heat (250-2,500 degrees centigrade) needed in the metallurgical, chemical, and other industries.

Because industrial areas in Romania are adjacent to cities, "waste" (residual) heat is used primarily to heat urban residential buildings. A study made several years ago, application of the findings of which has already begun, pointed out that in Romania 63 cities can meet their residential heating needs completely by utilizing waste heat generated in the individual areas, while an even larger number of cities can meet these needs in the same way, but only in part.

However, heat cannot be transported economically over long distances, especially low-temperature heat. For this reason, it is not economical to create centralized heat supply systems in rural communities in which residences are traditionally scattered, or even in communities which have undergone modernization and in which residential buildings alternate with individual plots. The

only efficient method of heating buildings and water in such areas is that based on nonconventional energy sources, whether it is firewood, as in times past, or is passive heating by a passive system, biogas, or geothermal water—the current solutions. (In the United States, for example, around 10 million square meters of solar panels are currently installed, chiefly on farms, obviously for the reasons mentioned above.)

As regards generation of electric power, this can be done with small hydroelectric plants, generating sets operating on biogas or geothermal water, or with wind turbines, which for the sake of economy are designed as medium-power generating sets coupled with the national power generation system in operation. In such cases a situation could arise in which power autonomy means that a particular community or zone each year delivers more power to the electric power generation system than it draws. This system is usually applied. This is the procedure followed, for example, by farmers in Denmark, where hundreds of 75-150-kilowatt wind turbines installed in special areas meet the needs of the farmers themselves and generate power for the national power system as well. [passage omitted]

Hence technologies and equipment thus far approved allow application of nonconventional energy sources at the present time by consumers in rural areas and the livestock raising sector and by small-scale industry and cooperatives. These consumers are the ones which, by the nature of the power requirement, can exploit these sources economically. The fuel conserved by this action, chiefly hydrocarbons and coal, makes its way into technological processes, in the form of raw materials for the petrochemical industry or of coking coal for the metallurgical industry.

IV. The main technical and economic indicators of the current solutions for utilization of nonconventional energy sources in the thermal area, as approved in standard projects, are comparable to those of coal-fired power plants. The heat produced from nonconventional energy sources is appreciably less expensive than that generated in coal-fired heating plants, which additionally cause pollution of the environment, a disadvantage not encountered with the nonconventional sources. In the case of plants generating electric power with wind turbines and small hydroelectric power plants connected to the national power generation system, the investment and energy generation costs are also competitive with the conventional solutions. A significant number of plants have been built which have demonstrated that the results have measured up to the design parameters. This finding is buttressed by the several examples given below.

Under the 1981-85 5-year plan the generation of thermal energy based on nonconventional sources exceeded 430,000 tons of conventional fuel, and has been higher than 300,000 tons of conventional fuel during the current 5-year plan. Of the total new sources, the chief contribution has been made by geothermal energy,

approximately 65 percent, being followed by biogas and solar energy with 15 percent each.

Projects have been evolved and approved in the area of solar energy on the basis of which more than 800,000 square meters of solar panels were installed by the end of 1988. According to some estimates, this area of solar panels installed puts Romania in 5th place in the world, after the United States with 10 million square meters, Japan with 8 million, and Australia and Israel each with more than 2 million square meters. The most significant accomplishments in Romania include more than 100 apartment building heating plants with a capacity of up to 750 cubic meters a day, for household water heating for 37,000 apartments and hotel complexes. Solar energy has also been used to heat living space, first at experimental housing units such as CS-I and CS-I at Cimpina and the Neptun Solar House, and subsequently at public housing complexes at Balotesti and Medgidia. Measurements made over the 1984-88 period show that a solar-heated apartment on the average consumes only 40 percent of the heat consumed by an apartment of conventional design.

Outside the household area solar energy is utilized with very good results in the processes of drying grain crops, vegetables, and fruits, drying hay and tobacco, drying bricks, and casting sand, etc. One representative plant was built at the Silo Base in the city of Oltenita in 1983 for drying grain crops. The solar installation has a sensing area of 1,200 square meters and delivers 70,000 cubic meters of hot air per hour, enough for drying 12-15 tons of grain crops per hour and for saving 102 tons of conventional fuel per year. In view of the good results obtained with a plant of this type, another 30 such plants have been built up to the present, and approximately 100 more solar dryers are to be placed in service by the end of this 5-year plan. In the livestock raising sector, solar energy is also used on about 700 dairy farms for preparation of hot process water needed for washing cans and milking equipment. Modular systems with thermosiphon circulation, with no circulating pump, with sensing areas of 12, 24, and 48 square meters, have been built for this purpose.

Solar energy is also applied in industry. We may mention the solar plant for preparation of hot process water at the Integrata Wool Enterprise in Constanta, with a delivery of 60,000 liters per day, at a temperature of 40-50 degrees centigrade, with a sensing area of 800 square meters and with sensors mounted on the production building; the solar plant for preparation of hot water for consumption purposes at the Zarea Wine and Champagne Enterprise in Bucharest, with a delivery of 6,500 liters per day at a temperature of 40-50 degrees centigrade, with a sensing area of 100 square meters and with the sensors mounted on a slope on the ground.

Solar energy is also used to generate electric energy, by direct conversion with photovoltaic cells. The solutions

most commonly used in Romania are based on silicon photovoltaic cells mounted in modules.

The characteristics distinguishing photovoltaic cells among generators of electric energy are that they are flexible and modular; they can cover power ranges from a few watts to hundreds of kilowatts, that is, they can be tailored to individual applications; they have no moving parts; they generate no noise, heat, or smoke in operation, and thus are totally nonpolluting; they are easy to transport and handle; they have a long service life, requiring little maintenance; and they eliminate the need for a fuel supply. Several applications of the nature of demonstration projects have been developed in Romania, such as a house supplied with electric energy of solar origin (3 kilowatts), water pumping systems (1.5 kilowatt), generating sets for telecommunications stations (150 watts), a public lighting lamp (15 watts), a cathode protection system (40 watts), a mobile source, etc.

In the area of wind energy standard projects have been evolved and approved, on the basis of which around 400 low-power and high-power turbines have now been installed representing a total power of around 700 kilowatts. A positive example in this area is that of Apahida Commune in Cluj County. This commune has revitalized the pastures in the area, thereby increasing the efficiency of livestock raising, by installing 1-kilowatt turbines to draw water. Combined solar and wind plants with photovoltaic cells and low-power turbines have also been developed for isolated consumers, to supply electric power to the weather stations at Titu in Dimbovita County and Virful Negovanu in Gorj County. Development of combined sun and wind plants yields advantages of two kinds. The first is represented by increase in the service life, in that the sun and wind are virtually complementary energy sources. The second is the drop in cost per unit installed power due to the considerable reduction in the storage battery and the fact that wind turbines are cheaper than photovoltaic cells. For high-power generating sets studies and technical and economic indicators have also been prepared for some aeroelectric power plants connected to the national power generation system. They have a capacity of approximately 450 kilowatts and are to be built during the next plan period.

Standard projects have also been evolved and approved in the area of biogas. Dozens of biogas plants based on them are now in operation at urban treatment plants, while 17 industrial-scale plants are in operation in the agricultural livestock raising sector. Noteworthy among them for their design and maintenance are those at the Institute for Raising and Fattening Hogs in Caracal, a locality which has also obtained outstanding results with its solar-powered grain crop dryer. Another 72 medium-capacity and high-capacity plants are now being started up to supply thermal and electric power plants. I must point out that, because of the especially good results obtained in livestock raising with biogas plants based on the technology developed by the Research Institute for

the Agrarian Economy, we support extension of this technology above all to units with capacities of 200 cubic meters, 600 cubic meters, and 1,200 cubic meters.

In the area of geothermal energy standard projects have been evolved and approved on the basis of which partial utilization of geothermal water has been achieved equivalent to 75,000 tons of conventional fuel for heating greenhouses and as a thermal agent in various industrial processes, heating of dwellings and household water, and in the lower temperature region, below 30 degrees centigrade, in spa treatment.

In the area of small hydroelectric power plants, around 200 such plants were built by 1985; they have generated 100 million megawatt-hours of electric energy per year. The program for the 1986-90 period calls for activation of a large number of installations with a capacity of 600 megawatts and generating 1,210 million kilowatt-hours per year.

V. In light of the results discussed in the foregoing, the action of ensuring energy autonomy of livestock raising units and of 5 communes in each district by 1989 has every prospect for success. It is necessary to go through the following stages in order for this action to be carried out with maximum efficiency from the technical and economic viewpoint: inventory of current energy consumers and of installed capacity by types of consumers (industrial, livestock raising, household consumers, etc.) and by types of energy (thermal and electric), with a detailed list of current resources (hydrocarbons, coal, plant waste, electric energy, etc.); analysis of user operating programs (continuous operation or operation only for a certain amount of hours during the day); analysis of energy-consuming technologies especially to determine places at which electric energy is used to generate heat; inventory of local nonconventional sources; analysis of the labor force available for operation, maintenance, and servicing of plants and personnel training capabilities.

The solution which is the best from the technical and economic viewpoint can be chosen on the basis of detailed knowledge of consumers and local resources in accordance with a study containing several power engineering options. To support the conduct of such original studies by each district, the National Committee for Science and Technology has had four documentary pamphlets on solar energy, wind energy, and geothermal and biogas energy written and disseminated to all district people's councils. The documents contain approved standard projects and officially approved equipment which may be ordered in 1989 and 1990. The main technical and economic characteristics, the developing institutes, and the manufacturing enterprises, along with the pertinent addresses, are given for each product and set of equipment, so that these organizations may be consulted.

Hence we believe that the technical and scientific basis has been created for future achievement of energy independence by an increasing number of rural localities. generation system, the investment and energy generation costs are also competitive with the conventional solutions. A significant number of plants have been built which have demonstrated that the results have measured up to the design parameters. This finding is buttressed by the several examples given below.

Use in Agriculture

[Article by Rodica Matei, director, and Gheorghe Dumitrica, Ministry of Agriculture: "Agriculture, a Broad Area of Involvement and Action"]

[Excerpts] We do not think it necessary to stress the need for broadening the range of energy resources used in the national economy, especially by increasing the share of nonconventional sources. the party secretary general, Comrade Nicolae Ceausescu, has emphasized this requirement on many occasions; at his initiative several important research programs have been drawn up in the areas of solar, geothermal, biomass and biogas energy, etc. The share of these resources in the energy budget of the country and of the various sectors is to increase on the basis of achievements in research and utilization. In this connection, the secretary general of the party pointed out in his speech delivered at the meeting of the Executive Political Committee of the Central Committee of the RCP [Romanian Communist Party] on 15 January 1989 that the programs for using new sources of nonconventional energy are to be carried out in their entirety despite the lowering of power consumption and the reduction of consumption in energy generation in the grid as well.

To a greater extent that other sectors of the national economy, agriculture represents an area for broad application of the new energy sources. The first reason relates to the direct economic effect of replacing traditional energy resources (oil, coal, electric energy) which an agriculture of the industrialized type consumes in fairly large amounts. From another viewpoint, extensive use of nonconventional energy sources combines and amplifies the effect of direct relief of the burden on the national power generation system, along with positive effects such as preservation of the ecological balance and elimination of power consumption (direct or incorporated) and costs of another nature required by protection of the environment. Their is the well-known case of neutralization of animal waste accompanied by production of biogas and even fertilizers. Lastly, there should be added to these aspects the greater compatibility of the specific nature of these sources (geographic distribution and the influence of local conditions) with the specific nature of agricultural activities, which also are characterized by pursuit over large areas and by combination of more extensive with less extensive activities, something allowing integrated use of nonconventional energy sources.

In keeping with the foregoing, the task assigned by the secretary general of the party of ensuring energy autonomy for agriculture in the near future through use of nonconventional energy sources is well founded. In accordance with the instructions issued by the higher party leadership, firm measures, and actions will be undertaken to extend the use of nonconventional energy sources so as thereby to meet the energy requirements of livestock raising units and some of those of the food industry, contract procurement of agricultural and forestry products, and water resource management. The share of new sources utilized in each specific case and the assignment of priorities in allocation of investments are obviously influenced to a considerable extent by existing local conditions.

Analysis of the potential for use of the nonconventional energy sources existing in subordinate units has revealed the following situation as regards use of nonconventional energy sources in agriculture. The Ministry of Agriculture, the Ministry of the Food Industry, the Ministry of Contract Procurement of Agricultural Products, the Ministry of Forestry, and the National Water Resource Council completed production equivalent to 182,000 tons of conventional fuel by the end of 1988. Existing facilities contribute chiefly to provision of the heat needed by greenhouses, livestock raising units, forestry enterprises, and food industry units, for drawing water from shallow wells, and possibly for heating such water. The experience gained thus far at a number of units, such as the Caracal ISCIP [State Enterprise for the Raising and Fattening of Hogs], the Seini AEICIP [Intercooperative Association for the Raising and Fattening of Hogs], the Gropeni AECIP [Economic Association for the Raising and Fattening of Hogs], the Roman ISCIP, the Ghidigeni Alcohol Factory, the Caracal Grain Reception Base, and others, shows that compliance with the technologies for operating systems based on the use of nonconventional energy sources ensures generation of part of the energy necessary for conducting production processes under conditions comparable from the technical and economic viewpoint.

According to estimates, the highest energy potential of nonconventional sources in agriculture is that of solar energy, followed by wind energy, biogas, biomass, heat pumps, and small hydroelectric plants. In 1989 mobilization of the ministries and subordinate units in use of nonconventional energy sources will lead to production equivalent to 616,000 tons of conventional fuel. By 1995 an amount several times greater than this will be mobilized from nonconventional energy sources in agriculture, the food industry, forestry, and water resource management; in this situation full use will be made of the energy potential of geothermal water, small hydroelectric plants, and biomass, and of 67 percent of that of biogas.

Considering the Ministry of Agriculture alone, we find that a total energy production based on nonconventional sources and equivalent to 279,000 tons of conventional

fuels will be accomplished by the end of 1989. Complexes and farms raising hogs, milk cows, and cattle for fattening, which annually require 215,000 tons of conventional fuel for conducting production processes, will be able to meet their entire needs through operation of existing facilities (13,000 tons of conventional fuel), and by expanding biogas facilities at another 900 livestock raising units. To give a general idea we may point out that 37 facilities with a production equaling approximately 14,000 tons of conventional fuel have been built and operated thus far, the majority of them located in the socialist sector of agriculture, while another 46 facilities are now being built, with completion and startup scheduled for this year, for an output equaling 22,200 tons of conventional fuel. [passage omitted]

In this context it is also interesting to record the share and principal uses of nonconventional sources in agriculture, ending with enumeration of some of the most important modes of utilization for the benefit of the national economy and the country as a whole, along with the significant financial and material effort required for use of the new sources of energy. The most important resource for the current year is biogas, followed in decreasing order (in terms of physical contribution) by biomass, geothermal water, wind energy, solar energy, and heat pumps. Biogas systems can be more widely applied because of the presence (accumulation) of animal waste on farms and at livestock raising complexes, of which waste deriving from hogs and poultry cannot be used as natural fertilizer and on the other hand is a powerful pollutant of water, soil, and air.

Specialized Romanian scientific research has evolved (and is still improving) 3 technological solutions for production of biogas, those developed at the Research and Design Institute for Waste Water Treatment, the Construction Study and Design Institute for Agriculture and the Food Industry, and the Institute for Food Chemistry. The specific problems inherent in utilization of this resource include proper building of plants and suitable plant operation and maintenance; ensuring that the organic substances treated are constant in composition, this entailing adherence to the carefully prepared feed formulas; and evaluation of the advisability (in the case of large cattle) of raising the stock in enclosures (when the animal waste can be utilized) or under the loose housing system (in which case the waste is lost). [passage omitted]

At present solar energy is used exclusively for preparation of hot household water in the case of, agricultural mechanization stations, or land improvement units, which are generally widely scattered. The experience of units using such systems shows that the most important aspect is good plant maintenance to ensure optimum output. One area in which solar energy could be widely used is that of more extensive drying of grain, vegetables, fruits, tobacco, etc.

The energy of wind is tapped by means of low-capacity turbines. Currently about 300 such wind turbines are in operation (150 in the cooperative sector, 100 at mechanization stations, and 25 in the government sector). Low-power turbines (ones of the Savonius type generating approximately 1 kilowatt) are used in pumping water from phreatic sheets at shallow depths (for irrigation of small areas) or discharges, recirculation of water for the purpose of aeration in fish basins, watering livestock in the field with water pumped from depths down to 150 meters. It is clear that two requirements must be met simultaneously in the case of this nonconventional source, the existences of a surface sheet of water and wind of constant speed. To make up the specific differences which appear locally between the two types of resources, we believe that from the technical viewpoint turbines should be perfected which operate at low wind speeds, just as the intended uses should be carefully defined at the local level.

The other sources are of less importance in our sector. Thus, the potential of around 15,000 tons of conventional fuel, the energy equivalent of geothermal water, is used in the districts in the Western part of the country to heat greenhouses and production areas. This use is to be extended to other areas in which such deposits will be worked. Heat pumps are in effect in the testing stage. Only one of them is currently in operation, at the Valea Calugareasca State Farm Enterprise. Wider use is made of biomass, which includes various plant residues, fruit tree and grapevine clippings, the woody fiber of flax and hemp, and waste materials in small-scale industry. These resources, estimated to be approximately 85,000 tons per year, are utilized as thermal resources partly replacing coal.

A number of general measures are needed to carry out the program for extending the use of energy from nonconventional sources: All the nonconventional source systems built must be utilized at full capacity, through proper maintenance and operation, to provide the energy needed by units and to make certain that the systems will be efficient. In the case of systems involving new sources, once construction has been completed and production has started an effort must be made to reach the design parameters within the period assigned. User organizations, working with the district authorities, must try to have builders of all new energy source systems now under construction complete these systems by the end of the 2nd quarter of 1989. As users, district authorities should make an analysis, together with the directors of other economic sectors whose activities result in available reusable energy sources, of the possibility of taking over and utilizing these sources to meet the energy needs of units. An inventory of consumers of thermal and electric energy and of sources of nonconventional energy (biogas, solar energy, wind energy, geothermal energy, the hydraulic energy of small streams, biomass) should be made in all units in each district, in accordance with the tasks assigned. Project justification sheets listing the locations, the possibility of local construction in the

district with local manpower or special labor resources in the district, and the investment funds and main materials required will be drawn up for carrying out investment projects in 1989 and 1990.

Along with these general measures relating especially to the organizational aspect, specific features of the sector must be taken into account to promote higher efficiency in use of nonconventional sources. One problem has to do with the energy budget of the sector and derives from the fact that there is a seasonal gap between production and consumption of energy. Thus, there is a surplus of electric energy in summer especially, when the production of biogas is higher, and a shortage of thermal energy during the cold season. We believe that the question could be settled by transferring the energy supplied to the national power system in summer to be used in winter on livestock raising farms. We believe that another important area is resolution of organizational and even legal questions (user participation in investment by providing suitable sites), along with mobilization of the cooperative sector and gaining its support for adoption of power generation equipment of this kind.

Last, there is another area which appears to be very promising and useful, that of using nonconventional energy sources in an integrated system. Agricultural units, large or small, can benefit simultaneously from contributions by several sources, this indirectly leading to increase in overall efficiency. The experiments conducted in this area, along with the Strejesti-Olti fruit drying system in which use of solar energy is combined with that of biomass energy, or a similar project to be carried out by the Fruit Growing Association in the commune of Brebu in Caras-Severin County, indicate a promising method of unquestionable efficiency. [passage omitted]

Results in Counties

[Article by Ioan Vulturar, Bihor County RCP committee secretary: "Initiative and Ingenuity Are Requirements for Resource Utilization"]

[Excerpts] Provision of the energy needed for development of industry and agriculture, indeed for all sectors of activity, is one of the most important problems of the current stage. As the secretary general of the party, Comrade Nicolae Ceausescu, pointed out in his November 1988 speech, particular attention must be devoted to making up the lag in the power engineering sector by 1990. Reaching this goal will require repeated effort and wholehearted commitment both in the area of electric power generation and in that of managing energy resources with maximum efficiency. To provide the energy necessary for smooth conduct of production, as Comrade Nicolae Ceausescu pointed out in the speech referred to, "it is necessary for us to make a transition even during this 5-year plan, next year, to wider use of nonconventional energy sources, using biogas, biomass,

solar and wind energy, thermal water, and small hydroelectric plants to meet all the needs of livestock raising farms and other agricultural units, as well as of small-scale industry, and achieve energy independence for all rural areas in a few years so that it will no longer be necessary to draw on the national power system."

Consequently, nonconventional energy, along with the many new technologies for recovery, recirculation, and reuse of secondary energy, must become sources worthy of consideration, ones making a greater contribution to enhancement and diversification of the energy resource base and relief of the burden on the energy budget of Romania. What elements in this connection does the experience gained in Bihor County recommend? To what extent is utilization of existing potential ensured? What obstacles are there to speeding up the process of using nonconventional energy sources? What follows is a concise account of a study made in this region of the country.

The first thing to be noted is the increasing production of energy from nonconventional sources. In 1988 the energy generated from these sources totalled about 106,000 tons of conventional fuel. The success of the measures adopted depends largely on efficient, thoughtful organization of action to generate and utilize energy from these sources. The process naturally began with identification and inventory of such sources, a cost-benefit study being conducted separately for each source. [passage omitted]

In more than a few situations it was unquestionably necessary to mold and develop a different mindset, a more conservative way of thinking about available energy resources, in order to observe and establish just how numerous and significant are existing possibilities to meet many of the energy supply needs at the local level.

How efficient were these actions? Thus far there have been built and placed in service in Bihor County 275 biogas systems with a capacity of 4,250 tons of conventional fuel per year, 176 solar power plants contributing 1,350 tons of conventional fuel per year, 15 small hydroelectric power plants with an installed capacity of 2,670 kilowatts, 119 energy recovery systems with a capacity of 320,305 tons of conventional fuel per year, and 61 systems for utilization of the energy of geothermal water with a potential of 56,184 tons of conventional fuel per year. By the end of the current 5-year plan there are to be built in Bihor County alone 9,105 biogas systems (20,988 tons of conventional fuel per year), 296 solar power plants (1,235 tons of conventional fuel per year), 3 small hydroelectric power plants (2,206 kilowatts), 22 energy recovery systems (6,722 tons of conventional fuel per year), and 19 systems for utilization of the energy of geothermal water with an annual capacity of 10,696 tons of conventional fuel. Attainment of these goals will ensure chiefly autonomous power supply by the end of 1989 for 5 Bihor County communes, with a

decisive contribution made in the next 2 to 3 years to substantial increase in the number of energy-independent rural localities in the county.

The program drawn up by mid-1985 for location of power generation facilities utilizing nonconventional energy sources was concerned primarily with the energy potential in existence in the area, as coordinated with the specific possibilities capable of determining the most efficient use of these resources. What are the specific areas offering the most advantageous context for use of these resources?

The biogas produced by the systems built at the waste water treatment plants of the Bihor County Public Utilities and Housing Enterprise, the Palota Hog Raising and Fattening Enterprise, and the Bihor Industrial Meat Production Enterprise provides the fuel required for the technological processes of sludge fermentation, heating production areas, heating hot water for consumption, preparation of asphalt mixtures, cutting metals, generation of electric power, and preparation of feed for livestock. Low-capacity systems installed in individual households are proving to be valuable and inexpensive resources in preparation of food in kitchens and for other household needs.

All that need be done to convince oneself of the increasing use of solar energy is to wander around the industrial areas of Bihor or the modern neighborhoods of the county's cities. Solar sensors provide hot water for households in more than 2,000 apartments in Oradea and the cities of Marghita, Salonta, and Dr Petru Groza. This utility, along with other more prominent technological uses of solar energy, is observed at the wood processing combine, the Romanian Railroads complex, the Metalica and Mecanica enterprises in Oradea, the Mecanica in Dr Petru Groza, the Electrometal cooperative in Oradea, etc.

However, Bihor, and Oradea in particular, are known as centers of Romanian geothermy, and rightfully so. In agriculture, thermal water is used to heat 20 hectares of vegetable growing and flower growing greenhouses at the Oradea Greenhouse Enterprise, the Rosiori, Sacuieni, Salonta, and Madaras agricultural production cooperatives, and in greenhouses belonging to the country public utility and housing enterprise. At the same time, geothermal energy is used to heat production areas and prepare food on the hog farms of the Marghita Intercooperative Economic Association in Mihai Bravu and the adjoining Livada (Nojorid) farm belonging to the Bihor General Construction and Assembly Trust.

Significant effort is being exerted toward utilization of geothermal water over the entire temperature range. Higher energy efficiency can be achieved precisely by registering consumers who require different temperature levels. Water from the geothermal wells situated on the premises of the Oradea Industrial Milk Processing Enterprise, which has a temperature of 97 degrees centigrade,

is used for pasteurizing milk, preheating the temperature-controlled room necessary for manufacture of dietetic products, preheating the air used in producing powdered milk, and for preparing hot water for consumption and technological purposes. Noteworthy results are also recorded in the industrial sector in drying wood materials by using geothermal energy, at the Sacuieni Furniture Factory and the Oradea Production and Service Enterprise. The file on thermal water would be far from complete if we failed to mention its use for spa therapy and at the Baile Felix athletic and recreational complexes, in the city of Oradea and the towns of Marghita and Alesd, at Tamaseu, Chislaz, Livada, Ciocaia, Adoni, Valea lui Mihai, etc. Nor should the fact be omitted that this resource is used to heat household water more than 11,100 apartments in the city of Oradea, the town of Marghita, and Sinmartin Commune. Lastly, specialists at the Institute of Assistant Engineers in Oradea have developed the first geothermal electric generating plant in the world using the potential of moderate-temperature geothermal water and carbon dioxide as the operating agent. It should be pointed out that electric energy was previously obtained throughout the world only from geothermal water with a temperature above 150 degrees centigrade. The geothermal generating plant at Oradea is supplied with water at a temperature of about 80 degrees centigrade. In simple terms, the technological process is based on the property of carbon dioxide of evaporating at temperatures above 31.4 degrees centigrade and of generating enough pressure to drive a geothermal engine, and accordingly a generator of electricity.

In view of the results obtained, the degree of utilization of existing potential, and the higher targets set for this stage of the 5-year plan, it appears to be necessary both to evaluate own efforts and ensure better cooperation among all responsible elements. For the sake of efficient utilization of the energy of geothermal water, for example, it is mandatory for us to solve a number of problems connected with increasing the flow rate of wells, avoiding salt deposits in supply pipelines, and improving the methods and equipment for injecting spent water back into a deposit to maintain the energy of the deposit. The efforts to increase the flow rate of geothermal water wells of the city of Oradea give an example of the activities in this sphere. It is estimated that the flow rate that can be exploited can be tripled, to 300 to 330 liters per second, to ensure generation of energy equivalent to 72,000 tons of conventional fuel per year.

Increased use of nonconventional resources is consequently a task of primary importance. To what extent can this large-scale activity rely on local manpower and specifically which goals require assistance by the central authorities? Experience has shown basically that projects of moderate complexity can be carried out with local resources if specialized technical assistance is provided. Such projects include in particular 5-10 cubic meter biogas systems and small hydroelectric power plants with an installed capacity of up to 5 kilowatts. Although

primary emphasis is placed on them, local efforts are not enough. For example, the assistance of the Department of Geology Central is essential for activation in 1989 of wells 1709 Episcopia Bihor, 1719 Nojorid, and 1706 Salonta and for drilling by the end of the 5-year plan of the 8 wells requested by the county people's council at the end of last year. The completion schedules must also be complied with; the equipment supply units must ensure delivery of complete sets of parts and subassemblies on the dates stipulated by contract.

Analysis of past activities and achievements shows that the results in Bihor Country are good. These results must be extended as quickly as possible. There is no need to stress just how urgent this task is or how important it is for absolutely all responsible elements to do everything possible to raise the contribution made by these resources to the level of their potential.

Use of Geothermal Energy

[Article by Maria Calinoiu and Serban Veliciu, Institute of Geology and Geophysics: "Geothermal Energy: Replacement and Completion Potential"]

[Excerpts] Tapping of geothermal resources is today one of the alternatives available in the efforts exerted toward meeting energy needs. The geothermal resources of earth contain an enormous energy potential, a potential theoretically 2,000 times greater than the energy potential of world coal reserves¹ with that of 1 kilogram of geothermal water (40-150 kilocalories). It follows that replacement of 1 kilogram of petroleum requires on the average 100 kg of geothermal water. However, a suitable flow rate of geothermal liquid at a temperature of 60-100 degrees centigrade or higher can be achieved only in areas having the favorable geological conditions referred to.) Unfortunately, current technologies for extracting and converting geothermal energy permit use of this energy only to a very small extent and only in certain geographic areas where especially favorable geological conditions are present. Such areas, in which the heat of the Earth's interior is transferred to the surface and accumulated naturally, by means of so-called endogenic fluids (mainly geothermal water), are situated either in the vicinity of volcanic chains of young geological age (as is the case with the interior of the Eastern Carpathians in Romania) or in large sedimentary basins (as is the case with the plain between the Carpathians and the Danube).

Before the 1970's geothermal energy was used on a small scale in a few countries (Italy, Iceland, New Zealand, the United States), and exclusively as a result of local requirements and conditions. The oil crisis, along with pollution and deterioration of the environment due to burning of conventional fuels, focused interest on geothermal resources as an alternative source of growing importance. The most desirable use of geothermal energy is its conversion to electric energy. Conclusive

examples are the plants with natural titanite at temperatures above 180 degrees centigrade built in volcanic zones in Italy, the United States, Mexico, New Zealand, etc. Tapping of geothermal water at temperatures between 60 and 150 degrees centigrade for purposes other than generation of electricity nevertheless appears to be of comparable importance, considering the much greater extent of areas containing such water. Geothermal water is currently used primarily to heat industrial premises and dwellings, as well as greenhouses, and as household and industrial water. Such forms of exploitation for energy have been developed in several countries.

In Romania the existence of geothermal water was known in the Roman era, when mention was made of the thermal springs at Herculane (30-54 degrees centigrade) and Geoagiu (39 degrees centigrade) and of the Baile Felix [Felix Baths] near Oradea (49 degrees centigrade). Extension of geological research in recent decades by drilling for hydrocarbons and ore throughout the country has resulted in the identification of many areas underground and of geological formations with favorable prospects for the accumulation of geothermal water at high temperatures. It became advantageous in this situation to drill wells to determine if deposits of this type were present.

The experience gained both elsewhere in the world and in Romania has indicated the need for carrying out projects to exploit geothermal resources for energy in consecutive stages, from geological exploration at the regional level to detailed work at the local level.

Until recently the exploration of geothermal areas was conducted in accordance with principles similar to those applied during the first stages of prospecting for petroleum, that is, prospecting of zones in which surface phenomena indicated the presence of deposits suitable for industrial-scale exploitation. The similarity of exploration principles also derived from a geological structure analogy which existed between accumulations of petroleum and ones of geothermal water. Accumulations of both kinds are generally associated with the presence of a reservoir made up of permeable, porous, or fissured rock with a cover of impermeable rock. However, two other essential conditions are required in the case of geothermal areas, a natural source of heat and a source for resupplying the rock reservoir with water. Because of these lastnamed conditions, a separate strategy and methodology are currently being increasingly evolved for prospecting and exploring geothermal resources, involving specialists in the sectors of geology, geophysics, hydrogeology, and geochemistry and drilling technicians.

In the 1960's the first two wells were dug at Oradea, and about 200 wells have been drilled throughout the country from 1970 to the present for geothermal resources. The drilling has resulted in identification and determination of the boundaries of 8 hydrogeothermal systems, 5 of which are situated in the Western Plain. There is 1

hydrogeothermal system in the Getic Depression (Cozia-Caciulata), and there are 2 in the Wallachian Plain (Bucharest-Otopeni and Insuratei). The most significant characteristics of these hydrogeothermal systems may be summarized as follows.

In the municipality of Oradea, water at temperatures ranging from 70 to 105 degrees centigrade is drawn from depths of 2,500-3,000 meters.

In the locality of Bors near Oradea, the geothermal collecting reservoir contains water at temperatures higher than 150 degrees centigrade.

In Banat, the water temperature ranges from 60 to 85 degrees centigrade and the water is drawn from depths ranging from 1,000 to 2,000 meters.

At Caciulata, the fissured sandstone situated at depths of 2,500-3,000 meters contains accumulations of water at a temperature of degrees centigrade.

In the Wallachian Plain, geothermal water at temperatures ranging from 60 to 65 degrees centigrade is drawn from limestone and dolomite situated at depths of 1,000 to 2,000 meters (in the Insuratei area) and 2,000 to 3,000 meters (in the Otopeni area).

It should be noted that recent joint geological and geophysical research conducted in the volcanic chain in the interior of the Eastern Carpathians has identified potential areas of geothermal water accumulation. At the same time, predominantly conductive geothermal systems, so-called boiling dry rocks, have been identified. Economical utilization of the thermal energy of these boiling dry rocks requires establishment of a hydrodynamic cycle through artificial fracturing of the rocks and injection of water from the surface. However, the technology for tapping geothermal energy is as yet in the research stage throughout the world. [passage omitted]

As regards evaluation of the energy potential represented by the economically exploitable geothermal resources in the territory of Romania, a comprehensive study completed in 1988 indicated that this potential represents the equivalent of approximately 900,000 tons of conventional fuel per year. Of this potential, the amount of thermal energy extracted in the hydrogeothermal systems referred to earlier was in 1987 the equivalent of 73,500 tons of conventional fuel.

The amounts of heat obtained by tapping naturally erupting wells with relatively low flow rates (5 to 10 liters per second) can be doubled by working the wells with specially designed heat-resistant submersible pumps (ones with delivery rates of 7-22 and even 50 liters per second). [passage omitted]

The geological research and experimental tapping of wells which discharge thermal water have been accompanied by intensification of efforts to increase efficiency

in use of geothermal energy. Thus, it has become necessary to solve certain problems faced in utilization of geothermal energy throughout the world: the still low efficiency of exploitation; the evolution of intensively exploited geothermal areas over time, an evolution about which little is currently known; the still inadequate development of technologies for multipurpose use of geothermal liquids in successive stages; the impact of geothermal energy on the environment; and the effect of subjective factors.

Efficient utilization of geothermal energy requires effective use the heat extracted in a year over the longest possible period. Hence it is necessary to increase the share of geothermal energy in long-term uses (technological processes, preparation of hot water for household use), the energy supplied by conventional fuel remaining to be used wherever appropriate, exclusively during peak load periods (for heating).

One parameter that has been found to be critical in tapping is the temperature of the geothermal water available in the vicinity of a certain type of consumer. For one thing we know that ordinary space heating systems are designed to absorb the caloric energy of water over the temperature range of 90-70 degrees centigrade, and for another that water whose temperature exceeds 90 degrees centigrade is found in only a few places in Romania (the Western part of the municipality of Oradea, at Bors, Sacueni, and Salonta, in the Western Plain, and at Cozia-Caciulata). Water at lower temperatures can currently be used to heat greenhouses and to prepare hot water for household and technological purposes. Uses of this type can ensure maximum extraction of caloric energy, provided that adequate heat exchangers are utilized.

The first systems designed specifically for use of a low-temperature (55 degrees centigrade) thermal agent prepared by means of geothermal water drawn at a temperature of 61 degrees centigrade began operation in the winter of 1987-88 in the new apartment buildings built in the process of systematic development of the locality of Otopeni.

Among the difficult technological problems which arise in exploitation, mention is to be made chiefly of salt deposits and the corrosion due to the chemical activity of mineral thermal water. Solution of these problems requires appropriate design and choice of the drawing method, combined with reinjection of thermally spent water. Reinjection will simultaneously ensure restoration of the energy of a deposit and in general to preservation of the geological and the ecological balance.

Specialists in Romania have successfully completed experiments on an optimum tapping system, use of geothermal energy under a twofold arrangement (a drawing well complemented by a water injection well). The first twofold geothermal system will be placed in operation in the Oradea area.

We stress the need for providing sufficient numbers of reliable submersible heat-resistant pumps for operating delivery rates of 7 to 50 liters per second as an important problem determining fuller use of geothermal energy.

In the category of subjective factors it should be noted that some users in various areas are unjustifiably reluctant to use geothermal resources. This is due especially to their being accustomed to having energy available by simply making connection to a power grid or to a gas pipeline. It is necessary to overcome a certain lack of confidence in the stability of geothermal sources over time. This makes it necessary to improve knowledge of the evolution of geothermal areas, primarily by preparing suitable hydrogeothermal models and accumulation of precise data by means of measuring instruments used specifically in the engineering of geothermal liquid deposits. The results of measures currently being conducted by specialists investigating various phases and aspects of exploration and utilization of geothermal energy will for one thing lead to identification of promising new areas and for another will permit evaluation of the present and future significance and of the advisability of developing systems for utilization of geothermal energy in various countries.

Footnote

1. The energy value of geothermal water can be evaluated by comparison of the caloric equivalent of 1 kilogram of petroleum (2,000-10,000 kilocalories).

Small Hydroelectric Plants

[Article by Claudiu-Viorel Savulescu, inspector general, Ministry of Electric Energy: "Major Resources of Small Hydroelectric Power Plants"]

[Text] Even in remote antiquity man learned to use, and did to a great extent use, the potential of the natural phenomena of flowing water to meet some of his energy needs. This is attested by the many systems developed, such as those used for grinding grain, cutting wood, rafting, manufacturing paper, etc. Water power (the energy potential of streams) is accordingly one of the first forms of energy exploited. As it is interpreted today, hydroelectric power did not make its appearance until electricity was discovered. The emergence of electricity led to utilization of the energy potential of waterfalls (by the turbine-generator-electric transmission line system), eliminating a basic obstacle by making the point of consumption no longer dependent on the point of generation.

Hydroelectric power is cheap; operating costs are low in comparison to other forms of power. On the other hand, investment costs are high because of the hydraulic engineering installations required (diversion of streams, building of dams, creation of reservoirs to ensure the proper flow rate, etc.). This explains why the rate of growth of electric power from hydraulic sources is not

too high, why the share of this form of power in meeting consumption needs worldwide remains low, and why the degree of utilization of hydroelectric potential is still small, especially in the less developed countries, which do not have the financial and technical resources required for the construction of hydroelectric facilities. Another constraint is represented by the ecological problems posed by the construction of such complex systems as hydroelectric power plants.

At the present time there are nevertheless many countries throughout the world which have channeled effort toward utilization of this form of energy, ones in which hydroelectric power performs an important function (and not a marginal one as is the general case) in meeting power consumption needs as a whole. Thus, there are countries which meet 50 percent or more of their energy needs with hydroelectric sources, such as Switzerland, Canada, Sweden, and Venezuela, and even more than 90 percent of such needs, such as Norway, and Brazil.

While we may say that, generally speaking, the bulk of hydroelectric potential has already been exploited, especially in the developed countries, important resources which have not yet been exploited nevertheless remain in small streams. The potential of these streams, in the form of so-called small hydroelectric potential, which virtually every country has undertaken to inventory, is tapped by means of small hydroelectric plants. These facilities have particular features as regards promotion, construction, and operation, so that they are treated separately in power engineering development programs. Although the parameters and dimensions of small hydroelectric plants differ from country to country, they all present a number of advantages in comparison to large-scale facilities. Lower initial financial outlays are needed; they offer the possibility of completion in a much shorter time; they allow utilization of local materials and manpower; they utilize inexpensive and simple facilities and equipment; and they set convenient operating requirements, in that they can operate even while unattended. It has been estimated that creation of 1 kilowatt of installed capacity at a small hydroelectric plant requires the expenditure of materials, equipment, and worked needed on the average for 2 tons of petroleum, the equivalent is produced in less than 3 years. For these reasons some countries, including Romania, devote particular attention to exploitation of small-scale hydroelectric potential.¹ Small-scale hydroelectric potential accounts for a significant part of the total hydroelectric potential of Romania; it can be developed at the local level with small hydroelectric power plants and low-capacity hydroelectric power plants. They can be situated on all streams which are of interest from the power engineering viewpoint, both in the vicinity or as part of complex facilities and on rivers of low potential which cannot be incorporated in general hydroelectric power systems. Systems are also installed to process the energy of the water discharged from certain industrial installations: paper factories, thermoelectric power

plants, and chemical plants, or units situated on the water supply channels of localities and in irrigation networks.

The small hydroelectric plants, especially those generating low power, should perform a special function, in creating energy independence for communes, as the principal sources of nonconventional energy for supplying rural consumers. This function requires efforts by designers and equipment suppliers to increase the reliability of assemblies, especially in the direction of adapting them to isolated operation with respect to the national power system.

The goals of utilizing small hydroelectric plants in Romania are classified as follows in accordance with regulations in force: (a) "craftsman" small hydroelectric plants, with a capacity of 2 to 20 kilowatts; (b) small hydroelectric plants with a capacity of 20 to 200 kilowatts; (c) low-power hydroelectric plants, with a capacity of 201 to 3,600 kilowatts. An inventory has also been made of the potential scope of such facilities, by basins and counties. It has been found that it is technically and economically feasible to develop a hydroelectric potential at the level of 1,200 megawatts, with an average annual output of the order of 3,000 megawatt-hours in approximately 3,000 small hydroelectric plants.

It is estimated that Romania can conserve fuel of the order of 1 million tons of conventional fuel by building such facilities, this allowing the recovery of investments in a relatively brief period. In view of these favorable preconditions, extensive programs of building such facilities were instituted as long ago as 1981, involving units of the Ministry of Electric Energy, units of the county people's councils, and ones in agriculture, forestry, water resource management, the wood processing industry, tourism, etc. Even units in the chemical industry, machine building, etc. became convinced of the advantages of having small hydroelectric plants, inasmuch as they represent sources of cheap energy produced by simple means, ones which, being situated in the immediate vicinity of the points of consumption, permit substantial reduction of transmission losses. While facilities with a total installed capacity of 67 megawatts were built during the previous 5-year plan, during the current 5-year plan this capacity has been increased to around 130 megawatts, and it should exceed 600 megawatts by the end of this 5-year plan.

The programs for building small hydroelectric plants and low-power hydroelectric plants are based on inventory studies conducted periodically by a specialized institute, the Hydroelectric Study and Design Institute, the purpose of which is to determine the priority of projects, which are scheduled chiefly on the basis of technical and economic indicators, the cost of energy generated and the specific investment. Thus, during the first stage facilities were commissioned which involved a lower

cost and which represent 60 percent of the annual generating capacity. High-cost facilities were scheduled to follow them.

In keeping with the specific nature of the streams on which they operate, the facilities in question are scheduled for use of the installed capacity for 1,000 to 4,000 hours per year, depending on the development system applied, these hours being concentrated in the spring flood periods and the transitional seasons. From the viewpoint of concept, the small hydroelectric plants and low-power hydroelectric plants are situated so as to ensure uniform working of a stream or drainage basin, so that the potential identified will be utilized as efficiently as possible, at minimum cost because of maximum concentration of the resources of construction and assembly units.

A unified concept in designing the facilities is ensured by the functions assigned by the Hydroelectric Study and Design Institute, which develops standard projects and master projects, reviews working drawings, and provides technical assistance for construction and user organizations. At the present time, 17 standard projects have been made available for small hydroelectric plants and low-power hydroelectric plants. In addition, a catalog of facilities of this type has been issued for users interested in building craftsman small hydroelectric plants of strictly local interest (residences, farms, chalets, etc.).

The electric part of small hydroelectric plants which are interconnected or are connected to the public power grid is designed and built by units of the Ministry of Electric Energy. Generally speaking, the plans for building small hydroelectric plants and low-power hydroelectric plants provide simple structural solutions involving maximum use of local materials and manpower and a minimum degree of occupation of farm or forest land (insofar as possible, the facilities are built in the beds of rivers); dependable and economical operation with the smallest possible number of operating personnel and maximum use of potential automation and mechanization; technical solutions involving minimum consumption of energy-intensive materials; maximum protection of salmon growing resources; and operation of equipment at the highest possible output for the longest possible time.

The main problems currently connected with efficient use of domestically manufactured equipment are ones having their origin in late delivery of equipment and in avoidance of failures during operation. There is permanent cooperation, coordinated by the National Committee for Science and Technology, among designers, suppliers, and users. It is given concrete expression in preparation and implementation of programs for increasing the reliability of equipment by eliminating the deficiencies found in units in operation, for broadening the range of standardized machinery, and for simplifying and reducing sizes to lower assembly production and installation costs. Research is also in progress in the

direction of improving control and automation systems and making them more reliable.

As an example, the Ministry of Electric Energy has formations of the Electrical Assembly Trust and county electric utility enterprises which specialize in the technologies specific to facilities of this kind. A decision has also been made to build local plants producing spare parts and repairing small hydroelectric assemblies.

Footnote

1. In China, 80,600 small hydroelectric plants have thus far been built, at the rate of 1,000 megawatts a year. Even in Europe, whose potential has been estimated to be approximately 25 terawatt-hours, or 6 million tons of conventional petroleum, there are many countries instituting programs for building small hydroelectric plants. We may cite Czechoslovakia, Yugoslavia, the FRG (with 600 megawatts installed under especially favorable economic conditions), and France (which with a potential of 8 terawatt-hours has built 1,500 small hydroelectric plants with a total capacity of 750 megawatts, around 50 percent of the potential, yielding an annual saving of 1 million tons of conventional petroleum). A special law was passed in France to stimulate the interest of local communities in such facilities.)

Increased Use of Biogas

[Article by Corneliu Craiu and Dan Togeanu, Scientific Research and Design Institute for Waste Water Treatment: "Utilization of Biogas at the Level of its Growing Potential"]

[Excerpts] The position of biogas among nonconventional energy resources exhibits certain special features which simultaneously affect availability of power and the variety of actual and potential uses. The chief aspect to be noted is the fact that initially biogas was a "byproduct" of some technological processes and has now become itself a primary product, but the other functions have not disappeared. It is a question of the process of treating waste water (urban and industrial) and of neutralizing waste matter from poultry and livestock raising complexes, which traditionally have required technological alternatives and outside power sources. As a result of anaerobic fermentation infested (or infesting) substances become producers of biogas; at the same time, the ecology is protected by neutralizing these substances and there is with no outside power source. With modern systems a number of secondary products of value as fertilizers are also obtained, the areas used for other than agricultural purposes are reduced, etc., this indirectly leading to conservation of energy.

There are currently 48 biogas systems in operation at urban water treatment plants, and 17 industrial systems in operation in the livestock raising sector. In addition, another 72 installations of medium and large capacity are being completed which will be supplied by thermal

and electric power plants. In agriculture it is proposed that biogas systems be extended to an additional 900 units.

In determining usable potential it is necessary to take into account the specific technological aspects of the potential and the possibility of integrating it efficiently into a cycle of secondary source utilization. Factors directly determining the pace and area of development of anaerobic fermentation systems for generation of biogas are the quantity, quality, and stability of supply of these resources; the geographic location; the possibility of combining biogas with other nonconventional sources; the architecture of the most advantageous uses (from the viewpoint of the energy agent or profitable activities); the specific investment and investment recovery periods; etc.

On the other hand, urban or industrial water treatment stations represent an area of wide applicability, the only restriction being that outfitting these stations with anaerobic fermentation systems makes it necessary to divert existing plants to different uses and thus entails substantial investment. Lastly, we must note in this context the importance of sensible coordination of all the elements involved in the design, construction, and proper operation of such systems. As in any other area, a weak link in the chain of utilization can create significant difficulties throughout the process. As a matter of fact, large-scale efficient use of new energy sources, including biogas, requires a process of social education.

Concentrated Positive Effects

The development of technology in recent decades, with direct repercussions in industry and agriculture, has made global problems more acute, especially the energy shortage and the problem of environmental protection, which requires the destruction of enormous amounts of waste resulting from industrial and agricultural production processes. In neutralization of organic waste anaerobic fermentation is a highly efficient treatment for converting organic matter and stabilizing waste material generated by the food industry, livestock raising, and excess biological sludge. Anaerobic fermentation simultaneously combines the need for destroying waste organic matter and cleaning up the environment with the possibility of producing significant amounts of useful materials (fertilizers of the nitrogen-phosphorus-potassium type) and large amounts of combustible gases (biogas).

In response to these requirements, specialized scientific research has been called upon to find solutions increasing the efficiency of the process of anaerobic fermentation and optimizing this process, in order to make the potential energy existing in waste usable and to make fertilizers available to agriculture with which to maintain the fertility of the soil (this indirectly leading to conservation of the energy incorporated in chemical fertilizers). Proceeding in this direction, research workers at the

Scientific Research and Design Institute for Waste Water Treatment (ICPEAR) have developed an original anaerobic fermentation technology which, while achieving a high degree of purification, makes it possible to obtain a significant amount of biomethane and liquid fertilizers with a high content of humic and fulvic acid.

The new technology evolved by ICPEAR (covered by patents 79697 and 80584) is at the same time completely independent from the energy viewpoint, in that anaerobic fermentation systems can be built with no investment (such as is required in the case of conventional systems) for acquiring electric power networks and equipment and keeping them in operation. The costs to users of electric energy are also avoided. The system operates continuously, with no external intervention except supply with organic residue, which can be introduced into the system either continuously or periodically.

The process of anaerobic purification accompanied by the generation of biomethane and agricultural fertilizers is more and more proving to be the most suitable technology for treating waste water heavily charged with biodegradable organic substances. The advantage of the anaerobic treatment processes lies in the fact that they destroy by digestion pathogenic bacteria and biodegradable solids suspended in waste water. The concept of a bioreactor involving self-mixing and retention of the supernatant, along with biocenosis in 3 stages and sequestration of the floating suspension in the main compartment of the fermentation vessel, ensures a degree of purification exceeding 90 percent with hydraulic retention times of 10-12 days for animal waste containing 3-5 percent dry matter and 6-8 days for heavily charged food industry waste water with a similar content of dry matter. [passage omitted]

Such bioreactors and anaerobic fermentation systems generating combustible gases and fertilizers have been in operation on a practical basis since 1982, with results promoting energy autonomy by making combustible gases available to the greatest possible extent. The effluent, with a low substance content (0.3-0.5 percent mineral salts and humic acid), is deposited in earth basins, from which it is taken during fertilization and irrigation periods and applied to arable land. The amounts of effluent administered per hectare depend on the nature of the soil and the type of crop. Generally speaking, approximately 100 cubic meters of liquid effluent are applied per hectare. Because the evacuated effluent, the need for building drying beds is eliminated and the effluent can easily be applied to the field as a fertilizer through irrigation systems, this resulting in further conservation of energy.

There are currently 15 such systems in operation, with another 23 under construction. In view of the results obtained by the systems currently in operation, the process will be applied at all livestock farms in Romania. In addition, 5 systems are to be built to process the

excess biological sludge generated by the chemical and food industries. Projects for modular capacities of 200, 600, 850, and 1,200 cubic meters of useful volume, depending on the production system, have been applied at the systems in operation and at those at which the process developed by ICPEAR is to be used. Projects are currently being evolved for lower capacity, 50 and 100 cubic meters of useful volume, to allow extension of the process to small farms. [passage omitted]

Urban Use of Biogas

[Article by Alexandru Ionescu, Institute of Systematic Development: "A Specific Resource of Urban Localities"]

[Excerpts] Consistent action in accordance with the principle that ensuring ecological balance represents an inseparable, organic element of particular importance in the work of socialist construction in Romania, the Romanian Government has exerted and continues to exert significant investment effort in the building of waste water treatment plants. There are currently nearly 200 urban waste water treatment plants which process a daily flow rate of 4.6 million cubic meters of water and return it to streams after the water has been cleaned. One of the largest waste water treatment plants in Europe, with a capacity of 1.3 million cubic meters per day, is now being built in the municipality of Bucharest as part of the integrated project for development of the Dimbovita River.

Significant amounts of pollutants in the form of sludge with a high content of organic matter are trapped during water treatment processes. This sludge cannot be returned to the environment as such, for one thing because the moisture content of the sludge is very high and poses the problem of pumping, piping, and depositing enormous volumes of matter. Secondly, the organic matter incorporated in the sludge inevitably starts decomposing and becomes a major source of air pollution. These considerations have made it necessary to treat the sludge to increase the degree of dehydration and reduce the amount of organic matter. [passage omitted]

The treatment technologies applied in Romania, and throughout the world as well, are based on aerobic processes consisting of power oxidation of organic matter and on anaerobic processes consisting of decomposition of organic matter by fermentation in an environment devoid of oxygen. Although the aerobic processes require lower investment for application, they entail high consumption of electric power in operation, while the anaerobic processes, which entail somewhat higher initial investment, involve lower energy consumption and the fermentation processes yield biogas, a combustible gas which can be trapped and utilized and which also makes a significant contribution to balancing the energy budget of waste water treatment plants. The technical creativity primarily of the personnel employed at treatment plants and their sense of sound management have led to a diversity of solutions in utilization of

biogas. For example, biogas is used in preparation of asphalt mixtures (Iasi, Suceava, Oradea), operation of lime or ceramic kilns (Rimnicu Vilcea, Curtea de Arges, Pitesti), preparation of hot water for household purposes for installations in the vicinity (in Iasi for the Danacu quarter and in Constanta for the Marine Lyceum), melting or welding of metals (Brasov, Timisoara, Pitesti, Oradea), operation of spark-ignition engines (Odorheiul Secuiesc), or operation of low-capacity greenhouses (Iasi, Pitesti, Suceava, Focsani).

Special attention is devoted to the process of utilizing biogas through conversion to electric energy. This process is based on biogas-fired generating sets developed by the National Institute of Thermal Engines. These sets produce electric energy in generators equipped with compression-ignition engines, the water cooling the motors being used as the thermal agent. This solution is an especially attractive one in that the energy generated can be distributed to remote consumers. Systems such as

this have been built at the Pitesti and Oradea waste water treatment plants, while a small biogas-fired plant with a maximum generating capacity of 4,500 kilowatt-hours per day has started operation at the Arad treatment plant.

Accomplishments thus far may be regarded as being merely the first step, inasmuch as biogas is currently produced only at some treatment plants (59) and, as has been pointed out, most of them continue to apply the aerobic fermentation process which does not involve production of biogas, while there are other possibilities of reuse and utilization which have been exploited only to a limited extent. For example, fermented and dehydrated sludge is an excellent fertilizer which is currently used very little in agriculture, while the sand and fats recovered from waste water remain virtually unused. These problems represent the chief directions of future research, along with efforts to improve existing plant and equipment.

ROMANIA

Bucharest Units Promote Sound Family Life

Health of Mothers, Children

27000058 Bucharest *INFORMATIA BUCURESTULUI*
in Romanian 13 Mar 89 p 4

[Interview with Ioana Oprea, secretary of the Sector 5 Party Committee, by Ileana Coman; date and place not given]

[Text] In the spirit of the profoundly humanist policy promoted by our party and state and personally by the party secretary general, Nicolae Ceausescu, continuing improvement of the quality of life and providing the younger generation with the best conditions for development are constant and highly important concerns of all elements with responsibilities in the socioeconomic and medical fields. We asked Ioana Oprea what is being done in Sector 5 of Bucharest to implement the demographic indicators and a growing natural increase and to ensure good public health.

[Oprea] Major social, economic, town-planning and municipal changes are taking place in Sector 5, as in all of Bucharest. New apartment houses have been built in the 13 September, Panduri, Rahovei, Sebastian, and Petre Ispirescu areas, the trade network has been considerably expanded, and the number of places in creches and kindergartens has been increased. The preschool educational units can now accommodate about 8,000 and the creches about 1,500. The health network has also been developed. Two new children's clinics have been opened on the ground floors of the apartment buildings on Sebastian Street and Alexandria Road, as well as a hospitalization section on Lacul Bucura Street, and a new polyclinic will soon be opened on Malcoci Street.

The Sector 5 Party Committee, the party committees in enterprises, and the mass and public organizations are cooperating regularly to protect mothers and children and to provide women with the best of care, especially pregnant women and newborn babies. The enterprises with predominantly female labor forces (Electromagnetica, Aurora, and Tinara Garda) take due care to change the jobs of pregnant women, avoiding hazardous environments and assigning them to the first shift only. Three large canteen-restaurants are operating in the sector (at Autobuzul, Electromagnetica, and Metalica) as well as 29 small canteens, while Vulcan and the Match Enterprise have opened enterprise canteens. All of these provide not only food at the work place but also prepared and semiprepared products designed to lighten women's housework. These units arrange periodic exchanges of experience and make regular detailed analyses of the quality of the food so as to please the workers as far as possible. We have a program to diversify the preparations sold for use at home and we check its implementation closely.

As for keeping track of the pregnant women's health and observing prenatal and postnatal leaves as well as all the laws to protect women, I want to point out that both the medical-health personnel and the other elements involved are doing responsible jobs. That is reflected in the improvement in the demographic indicators, and the results obtained in 1988 are significant in that respect. But in the spirit of self-criticism we are bound to say that we cannot state that we are satisfied and that there are still many reserves for improving the work in the vital field of health protection. There are still a number of shortcomings in recording and care of pregnant women in their first three months of pregnancy. The development of the newborn baby after its discharge from the maternity ward is not always consistently checked by the local medical-health personnel, nor have we made every effort to observe and enforce the hygienic-health standards on all jobs in all economic units.

Our objectives are very challenging and call for a responsible and more sustained effort toward health education in order to foster probirth behavior in young families.

[*INFORMATIA BUCURESTULUI*] Since you have mentioned health education as a main point in the demographic policy, will you please tell us what has been done in that direction?

[Oprea] The trade union and party committees in enterprises, jointly with the youth and Red Cross organizations, have organized many health-education programs both in the economic units and in the workers homes for youth, schools and institutions. On these occasions symposiums and conferences are held and films are shown to strengthen the family's sense of responsibility for raising and educating children, to combat the attitude of young couples who have no children or confine themselves to one child alone, and to show the bad effects of abortion. The competitions entitled "The Most Beautiful and Best-Tended Child," "Many Children Fulfill the Family" and "What We Should Know About the Health of Woman and Child" are meeting with a wide response, as well as those concerning rational nutrition, a balanced life style, etc. The programs of this kind that have been organized at Electromagnetica, Vulcan, Steaua Rosie, Autobuzul, Metalica, and Tinara Garda are notable for their frequency and quality. We feel the efforts of the clubs called "Femina," "Family Counsel," "Young Marrieds' School," and "The Mother's School" are also producing good results. We are trying to diversify methods of education on demographic questions and we often arrange man-to-man discussions, we are visiting homes, and we are involving the youth organizations more actively in solving some particular problems. The results have been immediate: In the course of last year the number of abortions was considerably reduced, as well as the number of divorces. But here too we must be more steadily persevering in order to strengthen all youths' and all workers' sense of responsibility to the family.

We fully realize that it is our duty and that of everyone, including the party committee, the responsible elements in the mass and public organizations, and health personnel to greatly improve our work in this field in order to achieve the best possible demographic indicators this year in keeping with the major material efforts the state is making to bring up and develop the young generation harmoniously and to secure the future of our socialist nation.

Premarital Counseling Centers

27000058 Bucharest *INFORMATIA BUCURESTULUI*
in Romanian 9 Mar 89 p 4

[Interview with Valentina Negritoiu, scientific researcher and psychosociologist, by Ileana Coman; date and place not given]

[Text] The first office of "Premarital Counseling" was opened in Sector 2 in 1983. Professionalism, perseverance and constant endeavors led, after 6 years of operation, to very useful experience that was the subject of a recent exchange of experience among the workers in the "Premarital Counseling" units in the municipality. Valentina Negritoiu answered our question, what part does this office play?

[Negritoiu] Plutarch said, "Marriage is the most important act in a man's life." Before marrying, both partners should think very maturely and analyze whether their ideas, principles and tastes are compatible and whether their feelings entirely agree. Accordingly, a marriage must be well prepared. Our society accords particular care and attention to harmonious development of the family, to provide for its health through the health of the couple, and to their indoctrination in mutual respect and love of children as a guarantee of the stability of the household, aspects that are vital to the party's and state's demographic policy, which is intended to secure a high birth rate in keeping with the requirements for preserving the youthfulness of the entire nation.

The programs implemented under the auspices of the "Premarital Counseling" service play a role of medical-social protection of the young families, helping to strengthen collaboration among all responsible elements in the field, to eliminate the risk factors, and to bring about an adequate evolution of the demographic phenomena in that way.

Our office's experience, which was also presented at the above-mentioned meeting, gave rise to a number of unquestionably valuable conclusions and suggestions, not only for personnel in specialized units but also for managers in enterprises and institutions and all educators, about fostering mental-emotional relations on jobs and organizing spare-time programs designed to improve the young people's knowledge and to contribute to newlyweds' solidarity.

[*INFORMATIA BUCURESTULUI*] Specifically, how is the "Counseling's" activity performed?

[Negritoiu] Our service provides the future spouses with a prenuptial medical certificate and important knowledge of health in its many aspects (obstetrical, gynecological, psychiatric, genetic, and endocrinological). At the same time they fill out a questionnaire as to when, where and how they met, where they work, what training they have, where they will live, etc. As regards the birth rate, general questions of the greatest importance to the future family are taken up in discussions with our physicians, psychologists, and sociologists. Moreover, I should tell you that we are consulted not only by young couples but also by mature people who want to start a family and bring healthy children into the world. Of course the most important procedure is for young people. Our institution is still new, and this activity is being continually improved, but we are entirely safe in stating that it is very necessary and that it graphically reflects society's concern for every individual and especially young ones at the important point of starting a family.

Over 1,000 young couples a year consult our premarital counseling service. They are mostly workers in the enterprises in Sector 2, but there are also students, engineers, and even physicians. Not only a few return after a while with wedding photographs or with those of their firstborn. Ileana and Constantin M., workers at Electroaparataj and 23 August, have two children now. Marina and Vladimir D., medical interns, also have a little boy. Florentina and Marian S., at the Pipera CIL [Industrial Central for Wool], are expecting their second child. There are hundreds and thousands of young people and just as many aspirations, hopes and certainties...Through them the future is created, and through them we can know now how tomorrow will look.

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